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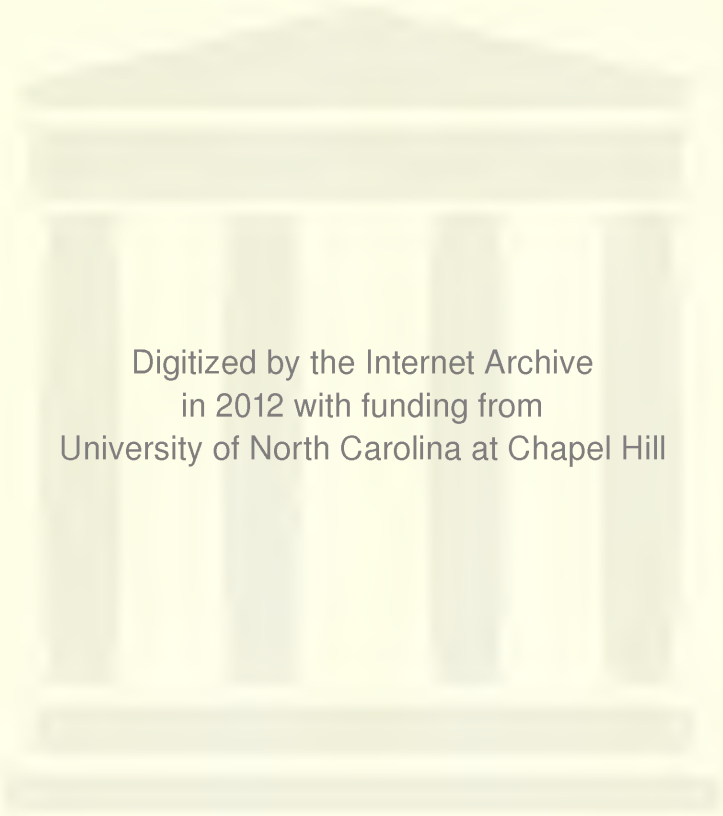

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UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

VOL. XXXIX AUGUST, 1959 NO. 1

HIGH SCHOOL WORLD PEACE STUDY AND SPEAKING PROGRAM

"THE UNITED NATIONS IN THE SPACE AGE"

Compiled by
E. R. RANKIN

Peace Handbook
1959-1960

THE UNIVERSITY OF NORTH CAROLINA PRESS

CHAPEL HILL MCMLIX

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PURPOSE AND POLICY

By Oscar K. Merritt, *Mount Airy, N. C.*

Business Man, Originator of this Program

The boys and girls in our high schools today, tomorrow must take over the leadership, not only of our own nation, but to a large extent of the entire world.

Has any generation ever faced so great a responsibility?

Are we giving our young people the information and training they will need?

The purpose of this Program is to stimulate interest and furnish information on the problems of World Peace. We aim to reach not only high school pupils, but through them the masses of our people, upon whose collective conviction eventual World Peace must hinge.

> "The sum total of the common sense of the common people is the greatest and soundest force on earth."—*Thomas Jefferson.*

High schools are in position to lead public thinking in their communities. Therefore, this Program of study and public speaking on World Peace is being offered to the high schools of our State and the nation.

The Program supports no one controversial thesis, but presents various points of view in unbiased consideration.

All persons and organizations desiring peace are invited and urged to help promote this Program in the high schools of their communities.

"For I dipt into the future, far as human eye could see,
Saw the Vision of the world, and all the wonder that would be;

"Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight, dropping down with costly bales;

"Heard the heavens fill with shouting, and there rain'd a ghastly dew
From the nations' airy navies grappling in the central blue;

"Far along the world-wide whisper of the south-wind rushing warm,
With the standards of the peoples plunging thro' the thunder-storm;

"Till the war-drum throbb'd no longer, and the battle-flags were furl'd
In the Parliament of man, the Federation of the world.

"There the common sense of most shall hold a fretful realm in awe,
And the kindly earth shall slumber, lapt in universal law."

From *Locksley Hall*

By Alfred, Lord Tennyson

FOREWORD

The University Extension Division of the University of North Carolina takes pleasure in announcing the Fourteenth Annual High School World Peace Study and Speaking Program. This Program exists for the purpose of encouraging the study and discussion of ways and means of building and maintaining just and lasting peace.

Two hundred and three high schools took part in the Program of 1946-47 on the subject: "Is World Government the Path to Peace?"; 189 high schools entered the Program of 1947-48 on the subject: "How Can the United Nations Be Strengthened?"; 182 high schools entered the Program of 1948-49 on the subject: "What is the Responsibility of the United States in World Affairs?"; 200 high schools entered the Program of 1949-50 on the subject: "Building World Peace in the Atomic Age: What Are the Responsibilities of the United States in the United Nations and in the Atlantic Pact?"; 192 high schools entered the Program of 1950-51 on the subject: "How Can We Help to Build World Peace in the Atomic Age?"; 223 high schools entered the Program of 1951-52 on the subject: "Building World Peace: What Is the Responsibility of the United States in the Light of Communist Aggression?"

Two hundred and forty-four high schools entered the Program of 1952-53 on the subject: "Building World Peace: What Have Been the Achievements and What Are the Prospects of the United Nations?"; 202 high schools entered the Program of 1953-54 on the subject: "Building World Peace: How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?"; 193 high schools entered the Program of 1954-55 on the subject: "The Role of the United Nations in the Building of World Peace"; 175 high schools entered the Program of 1955-56 on the subject: "The Future of the United Nations in Helping to Build World Peace"; 177 high schools entered the Program of 1956-57 on the subject: "The United Nations—Its Problems and Opportunities"; 143 high schools entered the Program of 1957-58 on the subject: "The United Nations in the Search for World Peace"; and 149 high schools entered the Program of 1958-59 on the subject: "The Role of the United Nations in the Modern World."

The central topic for this year's Program is: "The United Nations in the Space Age." Various responsible points of view are outlined in the articles carried in the bulletin and in the references listed. The individual students should study all of the material available and should present their own respective points of view on the subject.

This Program has received endorsement by many organizations, by four Governors and two State Superintendents of Public Instruction, and by the North Carolina General Assembly of 1947.

Appreciation is expressed to Oscar K. Merritt, originator of the Program, and to all whose addresses or articles appear in reproduced form in the handbook.

The attention of all interested in world peace is invited to the Rules and Suggestions which outline in a general way procedures which may be followed in making this Program successful.

E. R. Rankin
Director of the Program

RULES AND SUGGESTIONS

1. This Program is open to all high schools which will conduct it in accord with its basic intent and principles.

2. The Program shall be sponsored in each high school either by the school itself or by a suitable organization or individual acceptable to the local school administration.

3. The high school principal should appoint one member of the faculty as supervisor of the Program in the school.

4. Each participating high school should encourage as many as possible of its students to study the literature available and to write speeches on the subject specified.

5. It is strongly recommended that the Peace Handbook be assigned for special study or as a special project in connection with suitable high school courses. The vast majority of the participating high schools have used the Peace Handbook in connection with one or more of the following courses: English, History, Social Studies, Public Speaking, Government, Sociology, Civics, and Dramatics.

6. Each school shall select, by fair and suitable methods, not less than three nor more than six of its students to speak in a final public local contest. This selection is usually based first on required papers on the subject and second on speaking ability of the students.

7. Each speech shall be not less than 6 minutes nor more than 12 minutes in length.

8. Each contestant shall prepare and deliver his own speech. He shall be entitled to oral assistance in preparation of the speech and in practicing delivery, and may use materials from any source available. All speeches must be the original composition of the individual student, and all quoted materials must be duly acknowledged. Contestants are usually permitted to have their papers before them as they speak.

9. Each high school administration and each sponsor should enlist the aid of local churches, civic organizations, the press, radio, and all other suitable mediums to publicize the contest.

10. The final public speaking contest in each school shall be held at the earliest convenient date within the school year 1959-60. (The contest date is left flexible to accommodate the Peace Program to use in connection with courses of study.)

11. The winner in each contest shall be selected by a suitable committee of judges.

12. The University of North Carolina Extension Division at Chapel Hill shall supervise the Program and serve as a "clearing house," preparing and distributing background materials and ordering for the sponsors the "World Peace" Gold Keys to be presented to the winners.

13. Each registering school shall fill out the proper registration blank and send it, accompanied by the registration fee ($5.00 for North Carolina schools and $7.50 for schools outside North Carolina) to the University Extension Division at Chapel Hill. For this fee the Extension Division will supply the school with 10 copies of the Handbook and the "World Peace" Gold Key. From various adult civic clubs or other groups

in the city or county, sponsors can be secured readily in most instances and in all such cases the sponsors will provide the fee. At the same time, the school can pay the registration fee from its own funds. In any event, the interest of adult clubs and other groups and organizations within the community is to be enlisted to the maximum extent possible.

14. At the conclusion of the speaking contest, each school shall send to the University Extension Division at Chapel Hill a report of results, giving the name of the winner, the estimated attendance, the number of speakers, and a copy of the winning speech.

15. The school administration and the sponsor shall use all suitable means for publicizing the results of the contest, such as having outstanding speeches published in full in the local press and broadcast over the radio. Special efforts should be made to arrange for the contestants to deliver their speeches before various local adult groups and organizations.

16. At the public contest, the presiding officer should explain the primary objective of the Program.

17. It is felt that, in the judging of speeches, consideration should be given particularly to content, organization, and delivery. As a very general guide, it is suggested: (1) that the judges place 50 per cent value on content of the speech (with emphasis on logical, well-thought-out material directly related to the subject); (2) that they place 25 per cent value on organization of material (with emphasis on logical and literary arrangement); and (3) that they place 25 per cent value on delivery.

18. The "World Peace" Gold Key should be presented to the winner immediately after the decision has been announced.

19. In so far as local methods of procedure are concerned, these rules may be revised, when necessary, to fit the local situation.

ENDORSEMENT BY GOVERNOR LUTHER H. HODGES

To High School Principals and Teachers:

Again it is my pleasure to endorse the High School World Peace Study and Speaking Program, conducted for the past thirteen years by the University Extension Division of the University of North Carolina.

Since 1946, this very admirable Program has been an effective instrument for promoting, among the high school students of North Carolina, a sincere desire to study and openly discuss the best means by which world peace can be maintained and strengthened.

Most appropriately, the Program will again this year relate to the United Nations and its role in the Age of Space. In view of recent developments in this exciting field, coupled with steadily increasing world tensions, it is more apparent than ever that our young citizens should take an active interest in such matters. At the same time, it is clearly evident that a thorough knowledge of the workings of the United Nations is vital in any modern educational program.

The United Nations has rendered invaluable service to the nations of the world for more than a decade. It has experienced difficulties and disappointments, but at the same time it has served as a sounding board at which international differences could be discussed and world opinion brought to bear on those who thrive on discord. Certainly, we have a responsibility to ourselves and future generations of Americans to give careful study and consideration to these efforts to preserve peace.

I wholeheartedly commend this Study and Speaking Program and hope that a large number of our high school students will this year follow the more than 12,000 young people who have participated in and contributed to this Program since its beginning in 1946.

Sincerely,
LUTHER H. HODGES
Governor of North Carolina

July 31, 1959

ENDORSEMENT BY STATE SUPT. CHAS. F. CARROLL

To High School Principals and Teachers

Greetings:

It is very gratifying that high schools and high school students of North Carolina are afforded opportunity again to participate in the annual High School World Peace Study and Speaking Program that has been conducted so successfully by the University Extension Division of the University of North Carolina since 1946. The challenging subject for 1959-60 is: "The United Nations in the Space Age."

At no time in history has there been greater need for young people to gain clearer understanding of the United Nations and the service it can render toward the maintenance of peace and the betterment of life throughout the world.

Again I commend this Program for its efforts in encouraging high school students to become more intelligent citizens. I am satisfied that all who participate will profit.

With all good wishes, I am

Sincerely yours,
CHAS. F. CARROLL
State Superintendent of Public Instruction

July 20, 1959

THE UNITED NATIONS AND NATIONAL SECURITY

(Excerpts from an address by William I. Cargo, Director, Office of United Nations Political and Security Affairs, Department of State, before the Rochester Citizens Committee for United Nations Day, Rochester, N. Y., October 24, 1958, as carried in The Department of State Bulletin, volume 39, pages 725-733, November 10, 1958.)

The problem of our national security in the world of today is of direct personal concern to every American. It is a potent truism that war with modern weapons would weigh heavily on civilian populations. Our citizens throughout the country, particularly in urban areas, would face the threat of destruction of life and property. In broader terms the question of our national security is the question of our right and ability to develop American life and institutions for the well-being of present and future generations.

It is most appropriate also to relate American security to the role of the United Nations. The United Nations is now well into its second decade. At this same point in history the American people face a threat to their security greater than ever before. We may well inquire, therefore: What is the role of the United Nations in promoting the peace and security of the world and, accordingly, our own security?

In dealing with this question, I propose first to comment on the nature of the security position in which the United States now finds itself. Against this background I will then discuss the role of the United Nations in relation to our national security.

American Security in a Changing World

The security position of the United States has been sharply affected by developments since World War II. There was a long period in our history when this country, flanked by two great oceans, was nearly invulnerable. This, unhappily, is no longer the case. What has brought about this tremendous change?

First of all, there is the enormous destructive power of modern weapons. Notwithstanding all of the publicity about nuclear and thermonuclear explosions there is a real lag in our thinking about them. Perhaps we tend to think in terms of World War II. Perhaps the human mind recoils at the terrible destructiveness of these new weapons. Yet these weapons of tremendous power exist; they are possessed not only by the United States and the United Kingdom but also by the Soviet Union; and other countries are striving to develop them. These facts are of major importance in appraising the present security position of the United States.

Another factor of first magnitude in our changed strategic position is the reduction of the built-in safety factor which the United States has historically enjoyed. Our classical strategic position is that we have been geographically isolated from those who might threaten our security. We have been endowed with an abundance of natural and human resources which could, in good time, be converted to military strength. Should a threat to our security emerge, as in the case of the growth of ambitious military power in Europe or military action against our bases in the Pacific, we could rely upon our basic position of strength to permit us

months and even years to develop the military power to turn back the threat to our security. Our national security could thus be based on the presumption that the permissible reaction time between threat and response could be relatively long.

This pattern has been radically changed by modern technology. High-speed military aircraft can already span the oceans or the polar wastes in a matter of hours. Faster aircraft are constantly being developed. And as we progress into the missile era we must reckon with the fact that weapons of massive destructive power could approach our great cities at thousands of miles per hour and arrive within minutes of the time launched. Thus our permissible reaction time may now need to be measured in hours or in minutes rather than in months or years. The era of our history when we could build up our military strength *after* a threat to our survival had been launched is gone, probably forever. And gone with it are concepts of security which are no longer adequate to meet our requirements in this changed world.

The Soviet Challenge

In considering our current security position we should recall that there was a time when many tended to cite our large population, our seemingly ample resources, our scientific and technological skills, and our enormous industrial capacity as the answer to all existing or prospective problems. While no one would deny that our strength is great and the capacities of our country and its people enormous, I think we now see these things in somewhat more realistic perspective. We recognize that, populous as this country is, we represent only about one-twentieth of the population of the world. The Soviet and Chinese Communists control nearly one-third. We recognize that our resources, great as they are, are not unlimited. We are by no means self-sufficient. We know, in fact, that we import substantial quantities of some fifty commodities of fundamental economic and strategic importance. We also realize that we do not have a monopoly on scientific achievement or technical know-how. We have not failed, for example, to realize the contribution of scientists from friendly European countries to the development of the nuclear sciences and the first atomic weapons. We have had impressed upon us by visible signs in the night skies the achievements of Soviet scientists.

These developments which I have noted affecting the United States security position in the world are largely a reflection of scientific and technological developments. These have made a deep imprint upon our traditional strategic position and have greatly compounded our security problem. These developments would be in themselves highly significant. But we have also had, following World War II, a concentration of power in two main centers. To appreciate the problem fully in its present magnitude, we must assess the Soviet challenge to our security.

The Soviet Union, as the leader of world communism, is a country whose rulers are dedicated to the proposition that communism will inevitably be adopted throughout the world. They are dedicated to the achievement of this objective, however long it may take and irrespective of possible tactical deviations. Khrushchev has made this clear in his frank comment: "We will bury you."

Now this objective of Soviet communism, incompatible as it is with American security interests, would not necessarily be in itself a matter of serious proportions. The seriousness of the Soviet threat to United States security arises precisely because this objective of world domination is held by those who also control a political, industrial, and military system of great and increasing power.

What is the basis of this enhanced power position of the Soviet Union?

First of all, there is the rapid growth of Soviet economic capacity. The Soviet Union in its four decades of existence, and at incredible cost in human terms, has developed an industrial base second only to that of the United States. The Soviet gross national product is increasing by more than five per cent per year—a rapid rate, indeed—and is expected to reach nearly $350 billion by 1965. During the past decade the Soviet output of electrical power and oil has nearly quadrupled. Soviet steel production has shown a similar rate of growth. There are many other graphic illustrations of the rapidly expanding Soviet economy. And the Soviet Union has just this week announced that its new 7-year plan will call for the achievement by 1965 of production goals for steel, electric power, coal, and oil originally set for 1972.

We are sharply aware also of the increased Soviet scientific and technical capacity. The Soviet Union has developed its capabilities in the atomic field and devised nuclear and thermonuclear weapons at a rate which many people in the West did not consider possible. The advanced state of Soviet technical capabilities has also been apparent in their development of long-range ballistic missiles and in the launching of earth satellites. The very term "sputnik" has entered the international vocabulary, an achievement no doubt relished by Soviet propagandists.

Closely related to the growing scientific and technical capacity of the Soviet Union is the role of Soviet education. The Soviet Union systematically molds its educational system and regiments its students to serve the objectives of the Soviet Communist Party and the state. Heavy emphasis is placed on scientific training and its practical application in industrial engineering and technology. The vigor with which the Soviet educational program has been pursued should be carefully noted in this country. In 1914 only some 10,700 "specialists" graduated from secondary and higher special educational institutions in Russia. In 1955 such graduates totaled 1,634,000.

The Soviet educational system is also designed to fit the pattern of Soviet world objectives in its emphasis on languages. Every high school student in the Soviet Union must study a foreign language for six years. If he goes on to university work, he must learn one of the languages of Asia or Africa, a significant point in itself. Some 8,000 American students are studying Russian; ten million Soviet students are studying English.

Here then is Soviet education: It is geared in a massive way to the development of the industrial and military power of the Soviet Union and to the world objectives of Soviet leaders.

Soviet scientific, technological, and industrial achievements have been directed toward the building of a powerful military machine. Since

the end of World War II the Soviet Union has re-equipped massive ground forces, built fleets of modern jet aircraft and submarines, and developed stockpiles of nuclear weapons and missiles. This direct translation by the Soviet Union of scientific and industrial potential into military power is a salient factor in the world security situation.

Implications for United States Security

In this brief way I have sought to indicate what seem to me to be certain of the principal features of America's security position in the world today. Modern technological developments and the growth of an aggressive power system under the control of the Soviet Union pose for us serious challenges which we can ignore only at our peril.

There are, in my view, some rather clear implications in the situation which I have outlined. I would summarize these as follows:

1. The thought of war, with the colossal destructiveness which it might now bring—far exceeding anything else in human experience—is repugnant to most Americans. But security for this country cannot be found in recoiling from grim facts. We cannot allow the Soviet rulers the freedom to take the world at their leisure.

2. We cannot—and do not—rest our security on the *potential* military strength residing in our great industrial capacity and our reservoir of scientific achievement and technical skills. The United States and its free-world allies must have adequate military forces ready at all times. This concept of "force in being" is, for example, the basis of the formation of our Strategic Air Command. It is fundamental also to the organization and purposes of that great defensive alliance of free nations, the North Atlantic Treaty Organization. The concept of adequate "force in being" is, in short, the essential basis of the ability of the free world to deter those who might contemplate aggression.

3. We must recognize, as indeed I think we all do, the long-term character of the Soviet challenge to the security of the free world. We are not dealing with some transient political system that might be changed or obliterated by a "palace revolution." We must therefore place our reliance not in the presumed or hoped for weakness of others but in our own strength, deeply rooted in the physical power and moral fiber of our people and properly adjusted to meet the challenges of our age.

4. "Go-it-alone-ism" is not a feasible policy for the United States. Despite our considerable resources it is clear that our national defense requires the maintenance of strong collective-security arrangements with other free nations. We depend upon our friends and allies for vital raw materials, for manpower and equipment to oppose Communist aggression, for access to bases and facilities essential to our capacity to deter aggression, and for significant contributions in science and technology. Free Europe contains the world's largest industrial complex outside the United States. With this European industrial establishment, the free world has a substantial preponderance of productive capacity over the Communist world. Were this great industrial plant of free Europe to fall into Communist hands, the productive capacity of the Soviet Union would be more than doubled. The serious implications of

such an eventuality for American security are self-evident. For comparable reasons we need our other friends and allies of the free world in the quest for mutual security just as they need us.

5. Security is indivisible. It is indivisible in a geographic sense. An act of aggression cannot be ignored simply because it may seem to be far away. A threat to the independence and integrity of a state is no less serious because the intended victim may be small. The teaching of history in this matter is precise. Freedom everywhere has paid the price when free men have stood aside and watched aggression triumph in areas which they conceived to be not of direct concern to them.

Security is also indivisible in the sense that the battle for security in the world today must be fought on many fronts. It must be fought in political, psychological, economic, and social areas even more continuously than in purely military terms. The era of the A-bomb and the H-bomb is likewise the era of indirect aggression, of subversive efforts to destroy independent states. We have become well acquainted with the technique of so-called "volunteers" who somehow turn up in areas of tension. The battle for security today is also a struggle for the minds of men—and for their stomachs as well. Our own security is thus increasingly bound up with political, economic, and social conditions in allied and friendly countries and with the advancement of dependent peoples toward self-government or independence. We must therefore see American security today in broad perspective. It is notable that the United Nations operates on a similar broad basis.

Meeting the Challenge

In the light of this developing world situation, our Government and the American people have engaged in a broad program of action.

The United States has built up its own defense establishment to insure against the dangers of surprise attack. The Strategic Air Command, maintained in a high state of readiness, provides the backbone of our strong deterrent against aggression. Our recent achievements with nuclear submarines are further evidence of the constant labor of science, industry, and government to insure the primacy of our modern weapons systems.

We have pursued vigorously the mutual security program designed to assist friendly nations and allies in building up their economic strength and to maintain forces essential for their own defense and the defense of the free world.

Through collective-security arrangements such as the North Atlantic Treaty Organization and the Southeast Asian Treaty Organization, we have developed regional collective-security systems welding the free world together and standing as barriers to possible aggression.

We have developed a program of countering Soviet propaganda, making it possible for others to hear the truth about this country and world problems. I refer to the programs of the United States Information Agency, particularly the broadcasts of the Voice of America. Ambassador Henry Cabot Lodge, the United States Representative to the United Nations, challenged the Soviet Union to permit the peoples under its control to hear without obstruction the broadcasts of the full pro-

ceedings of the recent emergency special session of the United Nations General Assembly on the Near East. The Soviet Union sought to jam these broadcasts, once again illustrating their extreme sensitivity to efforts to provide the truth to people behind the Iron Curtain.

We have strongly supported the United Nations as a force for international peace and security and in its program to advance human well-being. This is a key element in the conduct of our foreign policy.

The Role of the United Nations

I have dealt with the challenges of world change to our national security and the measures we have taken to meet them. I would now like to turn to the question with which we began, namely, what can the United Nations do to promote international peace and security and accordingly that of the United States?

The overall answer to this question is, I think, clear: A strong and effective United Nations contributes to international peace, security, and stability, and consequently it also enhances the security and strength of the United States. To the extent that the United Nations is successful in its efforts to stop or prevent aggression and to find peaceful adjustments in disputes which might otherwise lead to war, the interests of the United States and United States security are advanced. To the extent that the United Nations contributes to economic and social well-being, it contributes to stability and expands the area of security around us. In my judgment the record shows that the United Nations has been both responsive to American interests and a force for peace in the world.

The United Nations and Collective Security

Now let us look at some of the specifics. First of all, the United Nations as an instrument of collective security:

It would be a mistake to seek to assess the U.N. in purely military terms. We should recall here, however, the role played by the United Nations in repelling Communist aggression in Korea. Forces from some seventeen countries gathered under the U.N. symbol and, for the first time in history, an international organization took successful action to counter aggression. The circumstances surrounding the U.N. role on the Korean question were, however, somewhat unusual. For example, the Security Council was able to act effectively because the Soviet Union was absent and therefore did not interpose the veto.

We must realistically recognize that the basic differences of view which exist between the Soviet Union and the United States sharply limit the ability of the U.N. to carry out the collective-security role envisaged in the U.N. Charter. In this situation the United States places its primary reliance for collective security on regional arrangements such as the North Atlantic Treaty Organization. These regional defense arrangements are within the framework of the charter and support its broad objectives of maintaining international peace and security.

I would add this: The United Nations has the necessary flexibility to facilitate the establishment of a broader collective-security system whenever the fundamental attitudes and policies of governments will make this possible of achievement.

Disarmament

No question dealt with by the United Nations is of greater potential significance to our national security than the question of disarmament. The destructive power of modern weapons and the development of newer and more effective means of launching surprise attacks make it clear that our security would be enhanced if we could achieve a limitation and reduction of armaments and armed forces under effective safeguards and controls that would insure that the agreed terms would be observed by all sides.

The crux of the disarmament problem seems to me to be whether agreement *can* be reached on the necessary controls and safeguards. Concretely, this means that there should be sufficient international control and inspection to insure that all disarmament measures agreed upon will in fact be faithfully carried out by *all* the governments concerned. A disarmament agreement cannot be a mere paper agreement. In clear terms: We must be assured that it will be carried out by the Soviet Union. Otherwise, our security would be diminished rather than enhanced.

Now it is precisely this question of safeguards and controls which the Soviet Union is likely to find the most difficult. The Soviets, with their emphasis on secrecy, will be clearly reluctant to open their territory to the required international inspection.

The United Nations has had, and will continue to have, an important role to play in the search for meaningful disarmament. The United Nations has provided an opportunity for all members to contribute their ideas on disarmament. It has facilitated actual negotiations by establishing bodies such as the Disarmament Subcommittee, through which extensive negotiations were carried out in London between the Soviet Union and Western states. The United Nations, by resolutions it has adopted, has recognized the importance of balanced measures of disarmament under appropriate safeguards. The United Nations might well provide the framework within which a control and inspection system might be established under the provisions of any disarmament agreement with the Soviet Union.

Disarmament is being discussed at this very time in the General Assembly of the United Nations. It is our hope that the Assembly by its discussions will assist in maintaining the forward momentum we have gained in the disarmament field.

Peaceful Uses of Atomic Energy

In addition to seeking appropriate agreed controls for nuclear weapons in disarmament negotiations, the United States has taken the lead in promoting international cooperation in the peaceful uses of atomic energy. In 1953 President Eisenhower, in his "Atoms for Peace" speech, called for the establishment of an international agency for this purpose. The International Atomic Energy Agency (IAEA) has now been established with headquarters in Vienna. Among its tasks, it will promote the application of radio-isotopes to agriculture, medicine, and industry; facilitate the exchange and training of experts and technicians in the nuclear sciences; serve as a channel for exchange of information

resulting from research; and undertake studies and surveys to encourage the development of atomic power.

The Agency is also designed to assist in establishing safeguards to prevent the division of fissionable materials to weapons purposes.

Outer Space

Although little is known about the nature of outer space, recent developments have made it clear that the potential uses of this new frontier for peaceful or destructive purposes are enormous. The United States has proposed technical discussions with the Soviet Union to see whether a system of control can be established that will insure that outer space will be used only for peaceful purposes. Although the Soviet response has not yet been favorable, we hope that the Geneva talks on nuclear weapons testing and the projected technical discussions on surprise attack will lead to similar discussions on outer space.

Peaceful Settlement of International Disputes

One of the major purposes of the United Nations is to bring about by peaceful means the adjustment or settlement of international disputes which might lead to a breach of the peace. It is clearly of the highest importance to settle differences between members of the world community before they become accentuated, possibly resulting in armed conflict.

The record of the United Nations as a force for averting war by settling differences through peaceful means is an outstanding one. It is well to recall some of the major achievements of the U.N. over the thirteen years of its life thus far. By its actions the United Nations:

Focused world opinion on the Soviet refusal to withdraw its forces from Iran and played a major role in the withdrawal of these troops in 1946.

Helped bring an end to Communist intervention in Greece, which was threatening the integrity and independence of that state.

Assisted in halting the fighting in Palestine and in implementing the Armistice Agreements between Israel and the neighboring Arab states.

Brought about a truce between India and Pakistan in the Kashmir dispute and offered a forum in which this question could be discussed with a view to peaceful adjustment.

Brought about a settlement of the future status of the former Italian colonies, a difficult question resulting from World War II.

Avoided a major war in the Suez crisis by bringing the pressure of world opinion to bear for a quick end to hostilities.

Supervised the clearance of the Suez Canal and assisted in reopening it to the commerce of the world.

Established a United Nations Observation Group in Lebanon in view of the external threats to the independence of that country.

Worked out, through the Secretary-General, arrangements to assist in preserving the independence and integrity of Jordan.

This incomplete list graphically illustrates the breadth of United Nations activities to preserve the peace.

The United Nations has in fact developed as the greatest single center the world has known for harmonizing the actions of nations.

INTERNATIONAL COOPERATION IN THE USE OF OUTER SPACE

(Execrpts from a statement by Francis O. Wilcox, Assistant Secretary of State for International Organization Affairs, before the House Committee on Science and Astronautics, March 6, 1959, as carried in The Department of State Bulletin, volume 40, pages 369-403, March 23, 1959.)

I welcome this opportunity to discuss with you the question of international cooperation in the peaceful uses of outer space and the steps which our Government has been taking in the effort to insure that this new frontier will be utilized for the good of all mankind.

The Issue

The issue is clear. Will mankind cooperate to insure the peaceful exploration and use of outer space? Or, will present-day international rivalries hobble and cripple man's efforts to explore and utilize the resources of the universe around us?

Man's venture into outer space, which is exciting and stimulating, is also a very natural development. Man's curiosity about his environment led first to his exploration of all the areas of the planet on which we live. Now science and technology have combined to make it possible to project his intellect and his curiosity outside this earth's atmosphere. I am sure that I voice the views of all of you when I express the hope that in projecting himself beyond the confines of our planet man will not also project those international rivalries and disagreements which have all too often hindered his progress toward a better way of life on this earth.

Unity of Purpose—Congressional Action

All of us here will recall the initiative taken by the House of Representatives last June when it passed a concurrent resolution introduced by the distinguished Leader of the House, John W. McCormack. This resolution expressed "the devout wish of all peoples everywhere, in every nation, in every environment that the exploration of outer space shall be by peaceful means and shall be dedicated to peaceful purposes." The resolution went on to express the view of the Congress that the nations of the world should join in the establishment of plans for the peaceful exploration of outer space and that they should endeavor to broaden man's knowledge of space in order to advance the good of all mankind.

The United Nations General Assembly Action

In an effort to implement this resolution and other initiatives by the United States to foster the peaceful uses of outer space, our Government proposed last fall at the United Nations General Assembly that a representative committee be established to make the necessary preparatory studies and recommendations as to the most fruitful actions which might be taken by the United Nations to facilitate the peaceful exploration of outer space.

Our thought here was a very simple one: Outer space is an area in which science and technology are each day making great and meaningful strides. But it is also an area in which we have as yet only a minimum

of knowledge, information, and technological know-how. Therefore, before seeking any final decisions as to what the United Nations might usefully do in this area, we felt it important to provide first for a broad survey of the kinds of action which the United Nations might take to facilitate man's peaceful exploration of outer space.

This view was endorsed by the General Assembly. As a result of our initiative, the Assembly adopted a resolution establishing an 18-member committee to survey the outer-space field as it may concern the United Nations and to report to the next General Assembly.

The resolution specifically requests the committee to study four things: (a) the activities and resources of the United Nations, the specialized agencies of the United Nations, and other international bodies in this field; (b) the scope of international cooperative programs in the peaceful uses of outer space which would appropriately be undertaken under United Nations auspices for the benefit of all; (c) the future United Nations organizational arrangements to facilitate international cooperation in this field; and (d) the nature of legal problems which may arise in carrying out programs to explore outer space.

I shall discuss each of these aspects of the resolution in detail later on and also indicate to you what the United States is planning to do to assist in the implementation of this resolution. However, I think it may be useful first to recall certain aspects of the debate which preceded adoption of the resolution. This may be useful because, as I indicated earlier, we feel very strongly that here is an area where international rivalries should not obtain. Here is an area where we can, if we and others are wise enough, use man's ingenuity and abilities to contribute to the well-being of all mankind.

Indeed it would be tragic if we were to repeat in outer space our unfortunate experience in the field of atomic energy. Our failure to achieve agreement on nuclear disarmament delayed for a considerable period the development of an international program for the peaceful uses of atomic energy which is now being carried forward through the International Atomic Energy Agency. We maintained in the United Nations that progress in the peaceful uses of outer space could proceed independently of our continued efforts to move forward on the highly contentious and complex issue of disarmament. We therefore urged the Soviets to work with the United Nations in developing a useful program of international cooperation in outer space.

The Soviet Attitude

Unfortunately, our efforts to persuade the Soviets to bring to bear on this problem their considerable know-how and experience in this field have thus far been unsuccessful.

General Assembly consideration of this subject began with a Soviet attempt to inject extraneous political issues into the serious efforts of the United Nations. They talked about so-called "foreign" bases, nuclear testing, armaments races, and other largely irrelevant subjects. Their aim, apparently, was to divert the United Nations from its purpose.

In this connection, our representatives at the United Nations were greatly assisted in our efforts to keep the record straight by Senator

Lyndon Johnson's excellent speech before the United Nations. He pointed out that the issue before the General Assembly was "to erase the accumulated differences of our earth's long and troubled history and to write across the vastness of space a proud new chapter of unity and peace." Senator Johnson then called upon the Assembly to take the necessary steps to keep outer space "unscarred by conflict," to "keep space as man has found it and to harvest the yield of peace which it promises." This, he said, could be accomplished through a "course of full and complete and immediate cooperation to make the exploration of outer space a joint adventure."

I believe that this speech by Senator Johnson and the favorable response which it received in the United Nations were instrumental in causing the Soviets to revise their original resolution. They stripped their proposal of many of the extraneous matters which it contained and presented in its place a resolution which was more germane to the issue under study. The revised Soviet resolution, as a matter of fact, was incorporated almost *in toto*, insofar as substance was concerned, in the resolution which was originally introduced by the United States and nineteen other countries.

The Soviet Demand for Parity

We were hopeful that what appeared to us initially to be a minor question, namely, the composition of the committee which would study how the United Nations might contribute to the peaceful uses of outer space could be resolved. However, we discovered very quickly that the Soviet Union was not prepared to handle this problem in the normal way and establish a committee which would be representative of the United Nations as a whole. They insisted, on the contrary, on so-called "parity" in the committee.

They overlooked completely the important role which many nations, large and small, are in fact playing in this field.

They overlooked the cooperative endeavor established under the International Geophysical Year.

They overlooked international arrangements for tracking and monitoring satellites and space probes.

They overlooked the large areas of medical research on which many nations have made and are continuing to make helpful contributions.

They overlooked the many eminent legal minds, throughout the world, who are now working on the legal aspects of outer space.

The Soviets not only wished to limit committee composition essentially to a balancing of United States and U.S.S.R. interests, but in addition they also insisted that they be given the right to determine whether specific nations should or should not be named as members of the committee. Obviously, the United States could not agree to this Soviet position, which would have drastically altered the very concept of the United Nations itself.

We attempted to work out with the Soviets a compromise on committee composition which recognized their prominent position in this field but which also recognized the legitimate interests of other members of the United Nations. However, our efforts to obtain agreement proved

fruitless. After the Assembly, by a vote of 53 to 9, endorsed our resolution, the Soviet Union, Czechoslovakia, and Poland, all of whom are named in the resolution to be members of the United Nations Committee on the Peaceful Uses of Outer Space, announced that they would boycott the committee.

There is no doubt that the Soviet Union could make a valuable contribution to the work of the United Nations committee. There is also no doubt that the committee will be able to do effective work even if the Soviets follow through on their announced intention to boycott it. In any event, I sincerely hope that the success of the United Nations in this field will eventually lead to a real desire on their part to cooperate.

I would like now to discuss in some detail how the United States envisages the work of this committee and our participation in it. It is unfortunate that the Soviets injected political issues into this operation. We consider the work of the committee to be essentially nonpolitical.

That we are deeply interested in the scientific and technological aspects of the committee's work is, I think, evident from the representation which we have named to the committee. Our chief representative is to be our Ambassador to the United Nations, Henry Cabot Lodge. I think that a number of other countries which are members of the committee will also name their permanent representative to the United Nations as their chief representative.

One of our alternate representatives is Dr. Hugh L. Dryden, Deputy Administrator of NASA (National Aeronautics and Space Administration), who is recognized as one of the leading scientists in this new field of space exploration. We look to Dr. Dryden and to his scientific colleagues both in and out of Government to carry a major load for the United States delegation. With their scientific and technological know-how they will certainly be of material assistance in the work of the committee. In the legal field, which is also to be studied by the committee, we will be represented by the Legal Adviser of the State Department, Loftus E. Becker, who has a deep interest in this particular area of international law.

What the United Nations Committee Can Do

Now let me turn to the specific details of the committee's work. The resolution passed by the General Assembly first of all calls for a census of the activities and resources of the United Nations, its specialized agencies, and other international organizations in this field.

This will include the facilities and work being done by the International Telecommunication Union (ITU), the World Meteorological Organization (WMO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and other governmental groups, as well as the activities and resources of the Committee on Space Research (COSPAR) of the International Council of Scientific Unions, and similar nongovernmental organizations. We are already undertaking a survey of these facilities and activities. Obviously the committee can carry out this portion of the resolution whether or not the Soviet Union participates. And I find it very difficult to see how anyone can ascribe political connotations to this kind of endeavor.

The next aspect of the committee's work is an examination of the kinds of activities the United Nations might undertake to further the peaceful uses of outer space. We are at the present time developing documentation utilizing governmental and nongovernmental resources which, we hope, will be useful to the committee in this respect.

The areas of cooperation which might be undertaken by the United Nations are exceedingly broad. We believe, moreover, that the United Nations will encourage rather than discourage nongovernmental international cooperative programs which are presently under way, particularly those under the aegis of COSPAR.

I am aware that some have suggested that governments and governmental organizations should stay out of this field and that international cooperation should be left to private organizations. I am also aware that highly significant work has been accomplished by nongovernmental groups under the International Geophysical Year program and that promise for continuing cooperation exists in the program now being developed by COSPAR. Clearly, the scientists of the world working together have much to contribute to the peaceful exploration of outer space.

But I also believe that, if outer space is to bring to mankind the great benefits which it promises, it will also be necessary to seek international cooperation on the governmental level in a number of areas. There is a great deal of significant work which can be undertaken with the assistance of the United Nations or through cooperation between the United Nations, and non-governmental international scientific groups. And many of these programs should be undertaken very shortly lest we take actions now which will make more difficult in the future man's use of this vast area.

For example, we have all heard about the use of outer space and space vehicles, either manned or unmanned, for such things as meteorological studies, mapping, communications, and navigation.

The chairman of this committee (Overton Brooks) recently pointed out that at least $2 billion a year could be saved in the United States alone by the use of weather satellites capable of making reliable long-range weather forecasts.

Estimates of the gains that might result from the use of communication satellites are equally impressive. Yet it is possible that by failing to take certain vital steps at the present time we may make more difficult the accomplishment of these important gains.

Thus, up to the present time little has been done to provide a permanent and continuing record of the orbits of objects which are sent into outer space. Possibly a United Nations central depository for such data would be useful in preventing collisions in outer space.

Another area of cooperation might be a United Nations resolution urging that nations agree on the regulation of radio transmissions from space satellites. As we all know, most vehicles sent into outer space at the present time are sent there for a particular experimental purpose. This purpose frequently has a limited duration, and the information which is returned to the earth from the satellite becomes useless after a scientifically determined period of time has elapsed.

At the present time we and the Soviets are sending into space some satellites equipped with solar batteries which have an indefinite transmitting life. Unless agreement is shortly reached on arrangements for terminating such radio transmissions after experimental data have been collected, we may soon find radio frequencies cluttered with transmissions which are useless to mankind. Agreements between governments are needed, and the United Nations might well serve as a catalyst in this connection.

While we talk about the vastness of outer space, we must not forget that even in this vast area we must anticipate that there will be traffic problems if we continue to allow dead satellites to orbit above the surface of the earth. Through international agreement, stimulated perhaps by United Nations action, it might be possible to work out arrangements for eliminating satellites once they have served their purpose.

Most of us probably agree that in the very near future manned vehicles will be traveling through outer space. The reentry and recovery of such satellites may well provide another area of fruitful international cooperation. Here again, I believe the United Nations could play a useful role.

The foregoing examples are illustrative. They do, however, indicate a few of the areas in which the United Nations may be able to assist man to insure the peaceful uses of outer space. I cite them as indicative of the kind of thinking that is now going on within the United States Government in preparation for assisting the United Nations Outer Space Committee to make purposeful recommendations concerning the possible activities which the United Nations might undertake in this field.

A third area which the United Nations committee will study is the future United Nations organizational arrangements for facilitating international cooperation in the peaceful uses of outer space. We have not as yet developed definite views within the Government as to the nature of the organization which the United Nations may wish to establish in the future. But I do wish to emphasize again that the United States does not propose to support any action which would result in the exclusion of nongovernmental international organizations in the field. Nor is it our intention to support the setting up of a United Nations organization which would make the functioning of nongovernmental organizations more difficult.

I might add that I am personally convinced that this view is shared by most of the other members of the United Nations. I believe, however, that there is an important area of international cooperation in the peaceful uses of outer space which can best be accomplished through the cooperative efforts of governments and that suitable United Nations arrangements will facilitate the development and implementation of such useful activities.

The resolution also requires the committee to study the nature of the legal problems which may arise as a consequence of the opening of outer space to man's use. Mr. Becker will discuss this matter at greater length. Let me only say that legal minds throughout the world have been concentrating on this problem and I am sure that the United Nations committee can make a useful contribution in this area.

The Universal Interest in Outer Space

Some people have questioned the desirability of the United Nations' undertaking a program in the field of outer space. If there was ever an area in which the United Nations had a legitimate interest, the peaceful development of outer space would certainly seem to me to be such an area.

After all, technological developments and scientific breakthroughs are not the exclusive monopoly of any nation or any people. We all know, and the history of mankind amply demonstrates, that ingenuity has never been restricted by national boundaries. Great discoveries have often been made in small laboratories in isolated areas of the world.

We realize that, no matter what happens, the study and exploration of outer space will go on and will take us where no human being has ever been before. It is our hope that this exploration, which, I repeat, will affect every single person in the world, can be used to benefit all of the peoples of the world.

It is clear to me, therefore, that the United Nations has an important role in this area. And it is my hope that the United Nations, by fostering cooperative efforts in the peaceful uses of outer space, will avoid the projection into man's newest frontier of those harmful international rivalries which exist on this earth.

THE PEACEFUL USES OF OUTER SPACE

(Excerpts from a statement by Dr. Hugh L. Dryden, Deputy Administrator of the National Aeronautics and Space Administration, before the U.N. Ad Hoc Committee on the Peaceful Uses of Outer Space, May 7, 1959, as carried in The Department of State Bulletin, volume 40, pages 891-895, June 15, 1959.)

The advancing progress of science and technology has brought us to a new frontier, the frontier of space. Man, until the end of the last century, was confined to moving to and fro in a two-dimensional world on the surface of the earth. He observed with envy the easy flight of the birds through the air. He studied the heavens above. With his powers of imagination and reasoning he gained knowledge and understanding of the universe in which he lived. A half century ago he mastered the secrets of human flight and left the ground to travel in the atmosphere. Now he has sent his instruments into space, establishing new satellites in orbit about the earth and two new planets of the sun. He presses forward to gain new knowledge and understanding and hopes himself to search out the new frontier.

Men of many nations have contributed to this forward surge of science and technology. Creative ability is not confined to any race or nationality. The records of past achievement repeatedly demonstrate this potential of men everywhere, given the opportunity to contribute. I am sure that the exploration of space will prove no exception. It is a task vast enough to enlist the talents of scientists of all nations.

Research with satellites and space probes began in the framework of the International Geophysical Year, itself a striking example of the

power of a united attack on global scientific problems. The international scientific community has been so stimulated by the results obtained from the IGY space program that it has itself established a mechanism for further consultation and collaboration, the Committee on Space Research (COSPAR).

Other uses of satellites are foreseen for accomplishing better certain tasks now accomplished by other means. The fields of application so far identified are those of meteorology and weather forecasting, long-distance communication, navigation, and geodetic measurements. Others may develop as knowledge and experience are gained.

Because man is himself the most adaptive and versatile measuring instrument and because of his inner desire to see for himself, the manned exploration of the solar system will surely come to pass. Preparation for the initial steps have already been taken, the immediate objective being to place man in a satellite orbit above the earth for a short time, to study his physiological and psychological reactions, to measure his ability to perform simple tasks, and to recover him safely.

These, then, would seem to be the three substantive areas which could most fruitfully be examined in our deliberations: space science, satellite applications in other areas, and manned exploration of space.

Space Science

Our newly acquired ability to hurl instruments into outer space makes it possible to carry out important scientific investigations that cannot be conducted at the surface of the earth. Eventually, when man himself enters the realm of space, such investigations will also include direct human observations. For such scientific investigations the convenient phrase "space science" has come into widespread use.

Space research as such is not really a separate scientific discipline. Included are the various branches of physics, chemistry, and the biosciences, supported by all the ingenuity that the engineering and technological sciences can bring to bear. Space science may be regarded as a continuation of the investigation of the earth and its atmosphere, of astronomy and astrophysics in general and of our solar system in particular, and of the origins and fundamentals of life—all from a new vantage point with new tools that promise increased effectiveness.

Just as the fullest development of space science involves the whole spectrum of scientific disciplines, so also does it require the interest, support, and participation of a whole world. In the mechanics of conducting a space research program there is need for international cooperation. The tracking of satellites and space probes and the collection of data from their radio signals provide examples of cases where such cooperation is important. In scientific research itself there are also many areas in which international cooperation is essential to the fullest realization of potential scientific gains. Joint efforts in the investigation of the ionosphere and the fundamentals of radio propagation through the upper atmosphere are required to obtain the worldwide coverage that alone can provide a complete picture.

But most of all, space research needs to draw upon an entire world for its ideas. Those ingenious insights into the real meaning behind a

set of observed facts that lead to real advances in the understanding of our universe are not the prerogative of a single nation or group but come from every quarter of the world where men are seriously occupied with scientific research. So vast is the challenge of space research and so great is the promise to mankind in the way of increased knowledge and ultimate benefits that the world cannot afford to neglect or slight the opportunities that lie before it.

To emphasize the vastness of space research and to indicate the potential usefulness of scientific data in dealing with problems of concern throughout the world, perhaps a few specific examples may be helpful.

Sounding rockets and satellites can be used to continue investigations of our earth and its atmosphere. The pressures, densities, temperatures, composition, and winds in the earth's atmosphere need to be determined as a function of altitude, time, and geographic position, before a complete understanding of our atmosphere can be achieved. Since the sun is the primary source of energy affecting the earth's atmosphere, the details of the relations of solar activity to phenomena in the earth's atmosphere are important. Of practical significance are the relations that may exist between the high atmosphere and weather at the surface of the earth.

Of particular interest is the ionosphere, that portion of the atmosphere which is electrified. At the present time we have a fairly complete knowledge of the earth's ionosphere up to 100 kilometers, a less complete understanding of the ionosphere between 100 and 300 kilometers, and only scattered information about the ionosphere at higher altitudes. Immediate problems of interest call for the exploration of the ionosphere out to its farthest reaches, which may be some tens of thousands of miles from the earth's surface. It is also important to pin down the fluctuations in the ionosphere with time of day, season, sunspot cycle, and geographic position. It is, of course, the presence of the ionosphere that permits the reflection of radio waves for communication beyond the horizon. The state of the ionosphere is as important to long-range radio communications as is the state of weather in the lower atmosphere to transportation and other human activities.

Looking further to the future, both the atmospheres and ionospheres of the moon and planets will be of great scientific interest. The possibility exists that a careful investigation of these may provide increased insight into our own atmosphere and ionosphere and their behavior.

The discovery of the Great Radiation Belt by Van Allen early in 1958 has opened an exciting new series of investigations in the general field of high-energy particles in space. The opportunity exists now to continue investigations of cosmic radiation, various plasmas in space, and their effects upon the atmospheres of the earth and planets. Those particles that cause the aurora are of interest not only scientifically but also because of the connection that exists between the occurrence of auroras and disturbances to radio communications at the surface of the earth.

Electric and magnetic fields in space form an important area of study. Particular interest focuses upon the earth's magnetic field because of its role in trapping the particles that form the radiation belt.

The question arises as to whether or not the moon and planets also have magnetic fields and how these might compare with that of the earth. Simultaneously the question arises of whether these bodies may have radiation belts like the earth's.

The opportunity to perform experiments over astronomical distances provides the scientist with a means of investigating the fundamental nature of gravity. Already the simple observation of satellites has yielded improved values for the shape of the earth. In the near future it will be possible to check the general theory of relativity by comparing the rate of a satellite-borne atomic clock with the rate of a similar clock on the ground.

Through the use of satellites and observatories orbiting above the atmosphere, the astronomers will have an opportunity to observe in the wave-lengths that do not get through to the surface of the earth.

Fundamental researches in the behavior of living organisms under the conditions of space and of space flight will be of interest in the area of the biosciences. Perhaps even more exciting is the possibility of finding life forms on other planets.

The conduct of research in space is itself the first useful application of satellites, and it is to be expected that man's new knowledge will be translated into forms that are meaningful and useful to men the world over. Of course, we cannot yet predict the full impact of this endeavor. The benefits to mankind that may develop as a result of experimentation in space will only be fully appreciated with the passage of time.

Other Applications

It is somewhat easier to identify at this time the potential benefits of other applications of space vehicles which are more closely related to familiar activities now accomplished with the more limited means currently available.

In the field of meteorology, as Ambassador Lodge pointed out yesterday, the satellite will open the possibility of a worldwide system for observing the weather. At present our attempts to predict the weather are based on data limited to a small portion of the earth. The meteorological satellite will give us the opportunity to fill the gaps existing today and to obtain a complete picture of global weather. With such information available, weather forecasting will be greatly improved with resulting benefits to agriculture, transportation, and other weather-dependent activities of importance throughout the world.

The communications satellite may well lead to vastly improved worldwide communications in terms of speed, capacity, reliability, and possibly economy. The value of communications among nations is universally appreciated, but, as our demands become more and more stringent, we face the prospect referred to by Ambassador Lodge that present systems will not be adequate to meet these demands. The satellite may provide the means of meeting these needs and in addition may exceed minimum requirements, thereby offering the possibility of fuller communication among nations than ever before. In its simplest form the communications satellite may be a large sphere of perhaps a few hun-

dred feet in diameter, which would be used as a reflector for radio signals beamed at it from earth. A more complex form would be the so-called repeater satellite, in which a radio repeater in the satellite picks up the radio signal from earth, amplifies it, and retransmits it to a station on another part of the globe.

Geodetic satellites offer the means of improving man's view of the size and shape of the earth and distribution of land masses and water. Optical observation of geodetic satellites has the potentiality of yielding the observer's location to less than 100 feet. Improved data on geographical details of the earth may be of economic as well as scientific significance.

The navigational satellite may provide the basis for an all-weather long-range navigational system for surface vehicles and aircraft. With the use of suitable equipment it would be possible to establish positions with great precision irrespective of the weather.

These applications of satellites may become feasible within a decade, but it should be recognized that the timing of the availability of these applications depends on many factors over which the scientist can exercise no control.

Manned Space Exploration

Within this same decade we can foresee the beginning of manned space flight. The initial plans for manned space flight are of such a nature that man himself is the principal subject of the experiments, although there is involved the development of solutions for many problems in space technology which are prerequisites to further steps. It will always be necessary to return safely from the high speeds in satellite orbit or in free space by reentering the dense atmosphere, reducing the speed without having the vehicle burn like a meteorite, and landing at a safe speed. Much later, when large payloads of the order of fifty tons can be placed in orbit, it may be possible to build new types of vehicles and propulsion systems of a completely different character to be assembled and launched from a satellite for operation wholly in outer space.

Even with present technology it seems feasible to advance down the road of manned exploration leading in a few decades to manned exploration of the moon. Still later will come expeditions to Mars and Venus and eventually to the bounds of the solar system. Such programs become enterprises to warrant worldwide support and cooperation, particularly in the conduct of research in the manifold fields of science required to insure the success of such an undertaking.

Other Areas Which Need To Be Studied

In addition to the three types of activity just outlined, which might comprise the basis of the subcommittee's initial inquiries there are other activities in international cooperation which are essential to and complement the substantive program of scientific and technical work. We should consider some of the technical characteristics of the operation of space vehicles and should examine possibilities for international cooperation in related matters.

STATE OF THE UNION MESSAGE

(Excerpts from the State of the Union message delivered by President Dwight D. Eisenhower before a joint session of the Senate and the House of Representatives on January 9, 1959, as carried in The Department of State Bulletin, volume 40, pages 115-118, January 26, 1959.)

As we meet today, in the 170th year of the Republic, our nation must continue to provide—as indeed all other free governments have had to do throughout time—a satisfactory answer to a question as old as history. It is: Can Government based upon liberty and the God-given rights of man permanently endure when ceaselessly challenged by a dictatorship, hostile to our mode of life, and controlling an economic and military strength of great and growing power?

For us the answer has always been found, and is still found in the devotion, the vision, the courage and the fortitude of our people.

Moreover, we face this challenge not as a single powerful nation, but as one that has in recent decades reached a position of recognized leadership in the free world.

We have arrived at this position of leadership in an era of remarkable productivity and growth. It is also a time when man's power of mass destruction has reached fearful proportions.

Possession of such capabilities helps create world suspicion and tension. We, on our part, know that we seek only a just peace for all, with aggressive designs against no one. Yet we realize that there is uneasiness in the world because of a belief on the part of peoples that through arrogance, miscalculation or fear of attack, catastrophic war could be launched. Keeping the peace in today's world more than ever calls for the utmost in the nation's resolution, wisdom, steadiness and unremitting effort.

We cannot build peace through desire alone. Moreover, we have learned the bitter lesson that international agreements, historically considered by us as sacred, are regarded in Communist doctrine and in practice to be mere scraps of paper. The most recent proof of their disdain of international obligations, solemnly undertaken, is their announced intention to abandon their responsibilities respecting Berlin.

As a consequence of these actions, we can have no confidence in any treaty to which Communists are a party except where such treaty provides within itself for self-enforcing mechanisms.

Yet step by step we must strengthen the institutions of peace—a peace that rests upon justice—a peace that depends upon a deep knowledge and clear understanding by all peoples—including our own—of the causes and consequences of possible failure in this great purpose.

I

To achieve this peace we seek to prevent war at any place and in any dimension. If, despite our best efforts, a local dispute should flare into armed hostilities, the next problem would be to keep the conflict from spreading, and so compromising freedom. In support of these objectives we maintain forces of great power and flexibility.

Our formidable air striking forces are a powerful deterrent to general war. Large and growing portions of these units can depart from their bases in a matter of minutes.

Similar forces are included in our naval fleets.

Ground and other tactical formations can move with swiftness and precision, when requested by friendly and responsible governments, to help curb threatened aggression. The stabilizing influence of this capacity has been dramatically demonstrated more than once over the past year.

Our military and related scientific progress has been highly gratifying.

Great strides have been made in the development of ballistic missiles. Intermediate range missiles are now being deployed in operational units. The Atlas intercontinental ballistic missile program has been marked by rapid development as evidenced by recent successful tests. Missile training units have been established and launching sites are far along in construction.

New aircraft that fly at twice the speed of sound are entering our squadrons.

We have successfully placed five satellites in orbit, which have gathered information of scientific importance never before available. Our latest satellite illustrates our steady advance in rocketry and foreshadows new developments in worldwide communications.

Warning systems constantly improve.

Our atomic submarines have shattered endurance records and made historic voyages under the North Polar Sea.

A major segment of our national scientific and engineering community is working intensively to achieve new and greater developments. But we must remember, advance in military technology requires adequate financing, of course. But even more, it requires talent and time.

Now, all this I give only as a matter of history; as a record of our progress in space and ballistic missile fields in no more than four years of intensive effort. At the same time we clearly recognize that some of the recent Soviet accomplishments in this particular technology are indeed brilliant.

Our own vast strength is only a part of that required for dependable security. Because of this we have joined with nearly fifty other nations in collective security arrangements. In these common undertakings each nation is expected to contribute what it can in sharing the heavy load. Each supplies part of a strategic deployment to protect the forward boundaries of freedom.

Any survey of the free world's defense structure cannot fail to impart a feeling of regret that so much of our effort and resources must be devoted to armaments. At Geneva and elsewhere we continue to seek technical and other agreements that may help to open up, with some promise, the issues of international disarmament. America will never give up the hope that eventually all nations can, with mutual confidence, drastically reduce these nonproductive expenditures.

III

I take up next certain aspects of our international situation and our progress in strengthening it.

America's security can be assured only within a world community of strong, stable, independent nations, in which the concepts of freedom, justice, and human dignity can flourish.

There can be no such thing as "Fortress America." If ever we were reduced to the isolation implied by that term, we would occupy a prison, not a fortress. The question whether we can afford to help other nations that want to defend their freedom but cannot fully do so from their own means, has only one answer: We can and we must; we have been doing so since 1947.

Our foreign policy has long been dedicated to building a permanent and just peace.

During the past six years our free-world security arrangements have been bolstered and the bonds of freedom more closely knit. Our friends in Western Europe are experiencing new internal vitality, and are increasingly more able to resist external threats.

Over the years the world has come to understand clearly that it is our firm policy not to countenance aggression. In Lebanon, Taiwan, and Berlin our stand has been clear, right, and expressive of the determined will of a united people.

Acting with other free nations we have the solemn obligation to defend the people of free Berlin against any effort to destroy their freedom. In the meantime we shall constantly seek meaningful agreements to settle this and other problems, knowing full well that not only the integrity of a single city but the hope of all free peoples is at stake.

We need, likewise, to continue helping to build the economic base so essential to the free world's stability and strength.

The International Monetary Fund and the World Bank have both fully proven their worth as instruments of international financial cooperation. Their Executive Directors have recommended an increase in each member's subscription. I am requesting the Congress for immediate approval of our share of these increases.

We are now negotiating with representatives of the twenty Latin American Republics for the creation of an inter-American financial institution. Its purpose would be to join all the American Republics in a common institution which would promote and finance development in Latin America. One great result of this would be to make more effective the use of capital from the World Bank, The Export-Import Bank, and private sources.

Private enterprise continues to make major contributions to economic development in all parts of the world. But we have not yet marshaled the full potential of American business for this task, particularly in countries which have recently attained their independence. I shall present to this Congress a program designed to encourage greater participation by private enterprise in economic development abroad.

Further, all of us know that to advance the cause of freedom we must do much more than help build sound economies. The spiritual, intellectual, and physical strength of people throughout the world will in the last analysis determine their willingness and their ability to resist communism.

To give a single illustration of our many efforts in these fields: We have been a participant in the effort that has been made over the past few years against one of the great scourages of mankind—disease. Through the mutual security program public health officials are being

trained by American universities to serve in less developed countries. We are engaged in intensive malaria eradication projects in many parts of the world. In this work, America's major successes in our own country prove the feasibility of success everywhere.

By these and other means we shall continue and expand our campaign against the afflictions that now bring needless suffering and death to so many of the world's people. We wish to be part of a great shared effort toward the triumph of health.

IV

Finally, by moving steadily toward the goal of greater freedom under law, for our own people, we shall be the better prepared to work for the cause of freedom under law throughout the world.

All peoples are sorely tired of the fear, and the destruction, and the waste of war. As never before, the world knows the human and material costs of war and seeks to replace force with a genuine rule of law among nations.

It is my purpose to intensify efforts during the coming two years in seeking ways to supplement the procedures of the United Nations and other bodies with similar objectives, to the end that the rule of law may replace the rule of force in the affairs of nations. Measures toward this end will be proposed later, including a reexamination of our own relation to the International Court of Justice.

THE ROAD TO A DURABLE PEACE

(Excerpts from an address made by Deputy Under Secretary of State Robert Murphy at Louisville, Ky., May 12, 1959, upon his receiving the Bellarmine Medal from Bellarmine College, as carried in The Department of State Bulletin, volume 40, pages 828-833, June 8, 1959.)

In our relations with the Soviet Union we have gained valuable perspective regarding the difficulty of negotiations with the Soviet Union in our efforts to achieve some progress on the limitation of arms. As you know, disarmament today is a complex, cloudy picture with a troubled history. Efforts to resolve the disarmament problem have been actively pursued in the postwar years, and in these efforts the United Nations has played a major role. It was in this forum that the United States, early in the postwar era, offered to share with the world its then total monopoly of nuclear power, but the Soviet refusal to cooperate blocked that plan. To give the disarmament problem urgent study on a priority basis the United Nations, in the early 1950's, created a Disarmament Commission. The commission in turn, in an effort to bring about speedy progress, created a subcommittee, in which it was hoped that in this small working group the major powers could devise an agreed formula for disarmament.

The subcommittee met many times throughout the period from 1952 to 1957, but it was its extended meeting held for many months in London in 1957 that seemed finally to make unprecedented progress toward an eventual solution of the disarmament problem. For a time the attitude of the Soviet representatives at that meeting appeared rea-

sonable. Then suddenly the Soviet Union reversed itself and abruptly refused to continue what had been viewed as hopeful negotiations. Immediately following its refusal to continue these negotiations the Soviet Union announced that it would boycott the Disarmament Commission and the subcommittee until a formula was devised to give the Communist countries equal representation within the Disarmament Commission. The United States expressed its firm belief that the commission must reflect, not the demands of any one group but the membership of the United Nations. After prolonged wrangling the commission, which has not met since the announced Soviet boycott, is now composed of all 81 members of the United Nations. In the future Soviet participation in the commission is expected.

In early 1958, when it became clear that the Soviet attitude for the moment prevented further useful efforts to progress toward disarmament through the United Nations, the United States proposed a meeting of scientists from both sides of the Iron Curtain to ascertain whether means could be agreed upon of detecting nuclear explosions. These talks, which were held in Geneva, resulted last August in a technical report which made clear the fact that it was feasible to establish a control system to police a test ban. President Eisenhower then immediately proposed a meeting at Geneva to negotiate an actual suspension of nuclear weapons tests. These negotiations continue at Geneva and revolve around the Soviet refusal to agree to an effective and impartial inspection system to assure compliance with the agreement reached.

The United States and the United Kingdom prefer to move toward a comprehensive test ban as quickly as possible. However, Soviet insistence on the veto and reluctance regarding the practical features of inspection have prevented agreement up to now. It was in view of this reluctance that the United States and the United Kingdom recently proposed that progress to date in the conference be consolidated by all three parties' agreeing to a ban of tests within the atmosphere and under water as a first step, with outerspace and underground explosions and their inherent difficult political and technical problems left for continued consideration as the negotiations proceed. As these problems were solved these types of tests would be incorporated in the initial agreement. The question of whether the Soviet Union is prepared to modify its position on the veto and other essential control requirements so that progress can be made on an all-inclusive ban is now under active negotiation in Geneva. We hope they will so that a final, lasting agreement can be quickly reached. If they will not modify their position, we shall press again for a phased approach which would ban tests within the atmosphere now as we work toward an eventual total ban on all tests.

Four Lessons Learned

In speaking of our experience in dealing with representatives of the Soviet Union on the question of disarmament and other matters during the past fifteen years it can safely be said that we have learned four general lessons:

First, where agreements have not been self-enforcing or have not contained provisions for an enforcement mechanism, they have not been enforced.

Second, the Soviet Union is capable of exploiting negotiations for other purposes than the reaching of a meaningful agreement. Their negotiations may simply contemplate a propaganda effect or a tactical distraction or diversion from other issues. Communists, we find, are willing for tactical reasons to sign meaningless agreements which might influence a target nation or people to relax and lower their guard.

In the third place, the disarmament record alone shows that Soviet representatives are tough, relentless bargainers, who make concessions only after they have exhausted every means of gaining advantage. They may use panic, discouragement, internal division, false hopes, or fatigue as weapons in the waging of diplomatic warfare.

In the fourth place, the record shows that, in the few instances where there has been a mutual desire for agreement, meaningful agreements are reached. Where those agreements provide for means of enforcement, they have been enforced.

Therefore we find that the prospect of eventual agreement, of a possible relaxation of tensions, is not hopeless and should not be abandoned.

Principles of Freedom

I think it is important in our effort to win the peace to be alert to the dangers to our religious ideals and form of society and not to adopt a purely defensive attitude in the face of Communist dangers. In concentrating on anticommunism we run the risk of neglecting the affirmative features of our own program and social evolution. We lend ourselves to a vast amount of free publicity of efforts by the leaders in the Sino-Soviet bloc to promote their ideology and atheistic approach to world problems. The cause of the free world would be advanced far more effectively if we would concentrate on the constructive features of our own free-world programs, the creation of better, more advanced standards of living, scientific and industrial progress, and the development of those spiritual values which are the background of our society.

Our policy for dealing with the total challenge of communism is based upon three broad principles. I suppose you might call them three principles of freedom.

The first principle is to remove the profit from aggression. This can only be done by means of a realistic capability to penalize aggression and a fearless determination to use that capability if need be. We have such a capability now, and we intend to keep it.

The second principle is to limit the opportunity of subversion. This is done by exercising our leadership to encourage political cooperation, to raise the standard of living for the masses, to improve social conditions and promote development trends among the free nations. Opportunities for Communist advance are essentially negative occurrences. They come about where freedom fails. Our best security lies in making sure that freedom does not fail.

The third principle is to maintain the pressure for peace. Despite every rebuff and disappointment we must continue, as we are continuing, with persistent and imaginative efforts to reduce East-West tensions, to demonstrate that aggression, as at Quemoy and Matsu, is not profitable, and to resolve the issues which threaten peace.

WHY THE UNITED NATIONS?

(Excerpts from an address by Secretary-General Dag Hammarskjold before the Norwegian Association for the United Nations at the University of Oslo, Oslo, Norway, June 3, 1958, as carried in the United Nations Review, volume 5, pages 14-17, July, 1958.)

It often happens, both among friends of the United Nations and among its critics, that its so-called successes or failures are discussed as though the organization were independent from the governments and disassociated from them in its efforts. This, for instance, appears to be in the background when it is said that it was—or that it was not—the United Nations that brought the Suez crisis under control. This is also the sense in which appeals are made for "support of the United Nations."

To yield to the temptation of regarding the United Nations in this manner is to overlook the basic character of the organization. It is in no way a kind of independent, state-like entity, least of all a "supergovernment." It is a platform, or more accurately a constitutional framework, for specific negotiations between governments in forms which have been added to those offered by traditional diplomacy and, with similar methods but with geographical delimitations, in various regional associations of states. A technique of diplomatic negotiation is obviously not something that can be "supported"—except, if you like, by making use of it when it appears to offer the chance of achieving a result that would otherwise not be within reach. Thus, when the United Nations is said to have scored a success, this obviously means only that intended results have been reached in making use of the forms of negotiations the organization offers. And when it is said that the United Nations has failed, this means, conversely, that it turned out that what was desired could not be reached through these forms of negotiation. A success, by the way, would then probably have been equally impossible in the classical forms, or on a regional basis. In other words, the technique of negotiation characteristic of the United Nations, even though it may have advanced further than other, older forms, has turned out not sufficiently advanced to make it possible for us to cope with these cases.

The New Techniques

What I have already said explains in part the first portion of my answer to the question: Why the United Nations? The organization has offered the opportunity of developing new forms of negotiation, advancing further than bilateral or regional contacts. In this, it has responded to a need which has made itself increasingly felt as the international system of states has been transformed. New nations in Africa and Asia have come into being and have had to be integrated into world politics. At the same time, the ties between various parts of the world have become so strong as to entail worldwide consequences for almost any international conflict, no matter how limited it may seem at the outset.

In this brief survey of the position of the United Nations I shall have to content myself with naming, without elaborate examples, the various new forms of diplomatic activity which the organization permits.

In part, they have had precedents in the League of Nations. In part, they are innovations or have at least progressed further than used to be possible.

The technique which has primarily attracted attention is, of course, the public debate in the Assembly or the various Councils. It represents a public diplomacy added to the private diplomacy that used to be the rule. The transition to public diplomacy allows public opinion to follow the unfolding of diplomatic operations and, conversely, it offers an opportunity for public opinion to influence the position taken in the course of the negotiations.

Next, I should like to mention the introduction of voting as a form of resolving diplomatic conflicts. In interstate politics, we are still only at the beginning of an evolution toward a system where a minority is presumed to bow to a majority. The normal thing in international deliberations remains, of course, agreement. The influence of this older attitude has prevented the voting technique within the United Nations from reaching full efficiency. On the one hand, agreement between the five permanent members of the Security Council remains a condition for achieving a decision of the Council in question of substance. On the other, as is well known, all the decisions in the General Assembly, and most decisions of the Council, are only recommendations, the effect of which may depend mainly on how well they are believed to reflect world opinion.

A third innovation within the United Nations, as far as diplomatic techniques are concerned, stems from the fact that all member states maintain permanent representation in New York and accredit ambassadors to the organization. This has created what actually amounts to a standing diplomatic conference at United Nations Headquarters. The new and broader opportunities of negotiation which have thus been opened are being used increasingly. Aside from those debates and votes which figure in the press, there is thus a continuous, intense and fruitful diplomatic activity of the multilateral type, which has led to a coordination of positions, to reconciliations and to planning which would have been far more time-consuming and complicated if conducted in traditional forms—if they had then been possible at all. It is dangerous to over-estimate the importance of personal contacts, but on the other hand it is unrealistic to underestimate the importance of the fact that qualified representatives of opposing camps live together, sharing their problems, and at the same time are in continuous touch with representatives of "uncommitted" governments. In these respects, as far as I am able to judge, things have developed further in New York than in any international center in the past.

Finally, and as a fourth new technique added to the arsenal of classical diplomacy, I should like to mention the utilization of the diplomatic functions of the Secretariat. Over the years, the weight of the work of the Secretary-General has increasingly moved from what are conventionally regarded as political and administrative tasks to the diplomatic ones. This has not stemmed from any directed or planned development; it has happened under the pressure of practical needs which have increasingly made themselves felt. The diplomatic activity

of the Secretary-General and his assistants is exercised in forms and for purposes which in many ways resemble those typical of the activity of an ambassador on behalf of his government, whether he is exercising "good offices" or operates as a negotiating party in relation to some other country.

In this connection, the position of the Secretariat is unique in that, of course, it does not represent any country. Nor has it, as has the representative of a government, the means of putting force behind its words. When diplomatic efforts by the Secretary-General are increasingly demanded by member governments, this must be taken as evidence that they have found it useful, in their relations with other states, to have available an outside party representing what might be called the common denominator.

Value of Universal Application

It is difficult for those on the outside to evaluate the evolution of diplomacy within the United Nations which I have just described. The touchstone of its importance should not be the superficial classifications of "success" or "failure." At the present stage, it must rather be whether the governments cooperating with the United Nations have felt the need of such new techniques—and use them.

STATEMENT BY DR. PICKERING

(Excerpts from a statement by Dr. W. H. Pickering, Director, Jet Propulsion Laboratory, California Institute of Technology, as carried on pages 132-134 of "The Next Ten Years in Space 1959-1969," Staff Report of the Select Committee on Astronautics and Space Exploration, House of Representatives, Washington, D. C., February 3, 1959.)

Before attempting to predict the specific achievements which the free world should be capable of accomplishing in the realm of space exploration within the next ten years, I believe that it is important to recognize several controlling factors which, in my opinion, may well determine the difference between what can probably be accomplished and what will be accomplished.

The most fundamental of these factors is that having to do with the motivation stemming from our national will to gain and sustain an ascendancy over the totalitarian world in the exploitation of space either for military or for humanitarian purposes. If we are content to continue in our present position of lagging the U.S.S.R. in the orbiting of scientific satellites or if we are prone to rest on our laurels once we may have achieved a major "first" in space, I would regretfully predict that a wide margin will exist between our inherent capability in this field and our actual accomplishments in the next ten years.

Assuming that it is the desire of this nation to take the lead in the Space Age, it would then appear that the only limitations which will prevent our being able to do so are those relating to our scientific and engineering competency, the efficient utilization of this competency, the adequacy of our planning, and the financial investment which the Congress is willing to authorize on a continuing basis.

I have no particular concern that the first of these will prove to be a serious limitation, for I believe that the scientific competency intrinsic to the free world is equal, if not superior, to that existing in the totalitarian countries. I would remark, however, that this nation might well benefit from the establishment of closer working relationships with the scientists of our allies. I also seem to now detect an awareness on the part of the public to recognize the necessity of giving greater support to our educational institutions, and to encourage the development of the latent scientific and creative abilities existing in our younger generation.

Planning

Inadequacy of planning, particularly that of a long-range nature, may well prove to be our most serious handicap in attaining significant breakthroughs in the next ten years of the Space Age. Impractically conceived missions having little chance of success because of premature scheduling which is based on the use of unproven components in the very early stages of development can have a most demoralizing effect on those involved in a program. Experience in the field of missilery and rocketry has shown that significant achievements come about as the result of the orderly planning of supporting research and a step-by-step advance in the engineering of new vehicles.

Next Decade

Within the coming decade the science of space technology should be advanced to the state where the following feats have a reasonable expectation of being achieved.

1. Reliably performing chemical rocket engines having thrusts of several million pounds will be available as propulsion systems.
2. Prototype models of atomic rocket engines will be undergoing static testing and ionic propulsion systems will be in the advanced experimental stage.
3. Highly reliable guidance systems will be perfected which are capable of permitting satellites to be established in precise orbits and space probes to be launched on predictable trajectories.
4. Improved structural materials capable of better meeting the new requirements imposed by space exploration vehicles will be developed.
5. More efficient and reliable solar-energized power sources having practically indefinite life will be in use.
6. Improved vehicle communications and tracking facilities to permit the accurate location of space vehicles and their remote control from the earth will be in use.
7. Communication relay and navigational-aid-type satellites will be placed in orbits, stationary with respect to the earth, and experiments leading to the establishment of a world-wide video and audio communication links will be in process.
8. A man-carrying satellite will be successfully placed in orbit and returned to earth.
9. Instrumented devices will be successfully landed on the moon so that information regarding the characteristics of the lunar surface can

be transmitted to earth. It is also very probable that an unmanned vehicle will be landed on the moon and returned to earth.

10. The characteristics of Venus and Mars will be investigated by instrumented space probes to obtain the answers to such questions as: "Does life exist on Mars?" and "Will it be possible for human beings to survive on Mars?"

11. Scientifically instrumented space probes will be launched into deep solar space and considerable knowledge of the environment in the interplanetary regions will be gained.

12. Weather observation satellites will be placed in orbit and the science of accurate weather forecasting on a global scale will be undergoing considerable refinement.

13. Experimental models of remotely controlled celestial observatories will be placed in orbit.

As to whether the free world or the totalitarian world will achieve the majority of these "firsts" within the next ten years, I cannot predict. I know of no valid reasons, however, why this nation should not be the leader in accomplishing a large number of these feats if the will exists to do so and if the controlling factors which I mentioned earlier are recognized.

THE PEACEFUL USES OF OUTER SPACE

(Excerpts from a statement by Ambassador Henry Cabot Lodge, U.S. Representative to the United Nations, before the U.N. Ad Hoc Committee on the Peaceful Uses of Outer Space, May 6, 1959, as carried in The Department of State Bulletin, volume 40, pages 883-885, June 15, 1959.)

Our task is to help to chart for the United Nations a course of cooperation among nations in the use of outer space for peace. In no field of endeavor is cooperation among nations more appropriate or more necessary. When we go about the business of exploring the universe the rivalries of men and nations really do look petty and ridiculous. The job is far too big for any one nation, no matter how big or how advanced in technology that nation may be. Every nation has a part to play and all peoples stand to gain from the results.

Therefore it is most gratifying to see this committee meet and get down to business. The wealth of scientific and legal knowledge possessed by the states represented here today is an excellent augury for our success.

Our first task here is to adopt a plan of work. The United States has some views on that subject, and I shall present them in a moment. But before doing so we should remind ourselves now that we are not dealing with remote dreams but with hard facts of the present and real probabilities—if not certainties—for the future.

As of this moment eleven earth satellites have been launched successfully, all of them since 1957. Five of these are in orbit today, and one is expected to remain in orbit at least 200 years.

Literally hundreds of high-altitude rockets or "space probes" have been shot hundreds of miles, and in some cases even thousands of miles,

beyond the earth's surface to gather scientific data. Two of these have passed forever out of the earth's gravitational dominance and are now in orbit around the sun.

As a result of these and other experiments during the International Geophysical year of 1957-58, whole fields of scientific knowledge are rapidly expanding—for instance, knowledge about the earth's magnetic field; about bands of radiation surrounding the earth; and about reactions of animals to space travel. Great strides are being made in rocketry and in radio communications with space vehicles.

Benefits Expected From Earth Satellites

Those are the facts of today. The probabilities for the fairly near future are, practically speaking, far more important to man's life on earth. Here are a few benefits expected from earth satellites alone:

1. Earth satellites can bring about a revolution in long-range weather forecasting, with incalculable benefits in saving multitudes of people from famine and floods. Satellites will scan the entire surface of the earth and radio back precise information on cloud masses, rain, storms, temperature, and other weather data. This will mean, for the first time, really useful long-range forecasting covering periods of several weeks and even longer.

2. Earth satellites may eventually become major tools of radio communication between cities and continents on the earth. There will soon be a great need for such new means of communication. The present transatlantic telephone cable, which has a capacity of thirty-six voice channels, is expected to fall behind the demand by 1962, and although a new cable is now planned with several times the capacity of the present one, it will already be overloaded by the time it is laid down. This kind of problem is arising the world over. The long-range possibilities of satellites as reflectors and repeating stations for radio messages are therefore tremendous. It is even possible that they may be used for intercontinental television.

3. Data from the International Geophysical Year have already changed man's notions about the shape of the earth. Geodetic satellites can further refine man's knowledge of his own planet. By using satellites we can determine geographic details for mapping with far greater accuracy, especially in previously unexplored land areas of the earth.

4. Ships will probably be able to calculate their exact position within less than a mile, in any weather, by tracking earth satellites which transmit radio signals.

Some of the longer range possibilities can also be foreseen. For example, scientists hope one day to set up an astronomical telescope in outer space. Thus for the first time man could view the stars clearly, free from the distortions caused by the earth's atmosphere. This kind of large-scale project might well call for teamwork by many governments.

Finally, there is the near certainty that man himself will circle the earth in satellites within a few years and that, sooner or later, he will travel in interplanetary space.

REPORT TO THE NATION: PROGRAM FOR PEACE IN EUROPE

(Excerpts from a radio and television address by Secretary of State Christian A. Herter, delivered on May 7, 1959.)

The basic principles that will guide us in the coming talks (at Geneva) are clear.

First, we believe in unity for the German people in one nation, under a government of their own choice. We cannot accept a permanently divided Germany.

We recognize, however, that the consequences of the division of Germany during the last 14 years cannot be removed overnight. Reunification will therefore have to be a gradual process assuring time for all the peoples concerned to adjust to the change.

Second, we believe that there should be ample safeguards and arms-control arrangements for the nations so that they can have assurance of being able to develop in peace and prosperity.

Third, we believe in guaranteed freedom for Berlin, with no reduction of existing rights and obligations, until Berlin can again assume its appropriate place in a united Germany.

Thus the heart of our policy can be clearly and simply said to be this: A Germany reunited in freedom, a security system linked with arrangements for arms control, and in the interim a free and secure Berlin.

Patient Negotiation

Negotiations with the Soviets can be very long-drawn-out. We should not expect quick or easy agreement. Some 400 meetings with Soviet representatives were required to reach agreement on the state treaty which restored freedom to Austria in 1955. Since it is our national characteristic to get things done quickly, we Americans are perhaps inclined to be impatient of delays in solving international problems. We must learn new patience in dealing with questions in which war or peace may be at stake.

We shall go into the Geneva talks with these general purposes:

Honestly and in good faith to seek some advance, even if small, toward a just peace.

To stand firm against pressure. We aim to make perfectly clear to the Soviets once again that we have the power and the will to maintain free-world positions. We do not intend to give the Soviets any reason to think that pressure tactics will profit them or divide and weaken the West.

To strive to probe Soviet intentions so as to obtain a better idea of their thinking. There is some chance that, even if no broad agreements are reached at these talks, better mutual understanding might still result.

To seek agreements that mean something. We shall try to reach agreements which rely either on self-enforcing provisions or on the obvious self-interest of the nations concerned.

To seek to relax tension. We want to lessen the strains on free world-Communist bloc relations so as to reduce the dangers of war and promote the chance of further progress. But we seek solid accomplishments and not merely deceptive promises.

A Firm Stand

One fact must be faced squarely. Fear and appeasement will not in the long run reduce the danger of war. Only courage and a firm stand on our rights and principles can do this. Once the Communist rulers soberly realize the depth of our solemn Berlin commitment, we believe they will refrain from putting to trial by force the present right and obligation of the Western Powers to preserve the freedom of the people of West Berlin.

If the dangerous tensions over Berlin are eventually relieved, let us hope the Soviets will realize more clearly that they and the free world would now have a primary interest in common—to avoid war. If so, perhaps the Soviets will see the wisdom of not again kindling a crisis, such as Berlin, from which war could conceivably quickly break out.

Perspective on Geneva Talks

The Geneva talks must be viewed in the perspective of worldwide problems and policies.

In a world of change and growth, many ferments are at work: Nationalism, anticolonialism, the yearning of the destitute for a fuller life. We must try better to understand these forces and to influence inevitable change along peaceful evolutionary courses.

THE PEACEFUL USES OF OUTER SPACE

(Excerpts from a statement by Loftus Becker, Legal Adviser of the Department of State, before the United Nations Ad Hoc Committee on the Peaceful Uses of Outer Space, May 7, 1959, as carried in The Department of State Bulletin, volume 40, pages 885-890, June 15, 1959.)

I want to turn now to the interesting and important development of the considerable and growing debate in existing "space law" literature concerning the need for or advisability of an early international agreement delimiting the boundary between air space and outer space.

Certain proponents in this debate begin with the proposition that existing international agreements, as well as various national laws, while recognizing the full and exclusive sovereignty of each state in the air space above its territory (including its territorial sea), do not contain definitions of what is meant by "air space." These proponents argue that a definition or delimitation of the boundary between air space and outer space is required in order to fix a top limit upon national sovereignty, so as to permit the reaching of new international agreements as to the legal character of outer space. These commentators proceed to argue that for technical, political, and other reasons concepts of national sovereignty should be held, or agreed, not to apply beyond the top limit of air space, as variously defined, and that some other concept—free for all, incapable of appropriation, United Nations control, and so forth—be applied beyond such limit.

There are wide divergencies of view between and among these commentators as to how "air space" should be defined, and several have from time to time radically changed the definition or definitions which

they have proposed. Some of these definitions have involved the concept of successive contiguous zones in space extending out from the earth.

Other participants in this debate suggest that "air space" be defined as extending to a certain altitude without, as a necessary consequence, deciding that the sovereignty of a state ends at the upper limit of air space. Under this type of arrangement, national sovereignty could be held, or agreed, to extend to some altitude in excess of air space.

There would seem to be at least three differing approaches to this group of problems to which the *Ad Hoc* Committee may wish to give attention in its deliberations:

1. The committee could examine the wisdom of a strictly pragmatic approach. Under this approach activities in outer space would be carried out as at present, permitting customary international law to be allowed to develop over the course of time, without specific efforts being made to fashion that law by agreement. The adoption of this approach would mean that the committee would assign a very low priority, if any, to the definition of "air space."

2. A second course of action, which the committee may wish to consider, looks with favor upon the feasibility and desirability of concluding international agreements on particular aspects of space exploration and activity. Instead of seeking to agree that air space extends so high and no higher—which would leave entirely unresolved the nature of the regime to be applied in outer space—this approach suggests the seeking of international agreements to regulate space activities as they impinge both upon air space and outer space.

3. A third possible course which the committee might consider is some limit of altitude beyond which it would be considered that space unquestionably constitutes outer space, and not air space or contiguous zones. Without trying to settle definitively where air space ends, nations might be able to agree within the near future that space beyond a fixed distance from the earth definitely constitutes outer space and that this space is free and open to all states for activities not precluded by applicable agreements or rules of international law. It would most likely be acknowledged that in the present state of scientific and technical information and experience there could be no definitive agreements on regions somewhat nearer to the earth, but in the future it might be possible to arrive at a top limit for air space and, perhaps, a lower limit for the beginning of outer space than that originally agreed upon. There would then be the subsequent question of the value and advisability of establishing any contiguous zones.

This type of approach would have the advantage of bestowing a large measure of freedom of action on nations with respect to a defined region of outer space. Although only the primary step of fixing an altitude beyond which space constitutes outer space could probably be taken at an early date, this course of action would make possible high priority for an early start on consideration of this whole problem. Such an approach should, of course, be supplemented by the conclusion of international agreements of the type envisaged in the second alternative approach, discussed above.

U. N. COMMITTEE ON OUTER SPACE COMPLETES REPORT

(Excerpts from a statement made on June 18, 1959, by Ambassador Henry Cabot Lodge, U. S. Representative to the United Nations, as carried in The Department of State Bulletin, volume 41, pages 138-141, July 27, 1959.)

The United States believes that the *Ad Hoc* Committee on the Peaceful Uses of Outer Space is now in a position to complete its work. We have received excellent reports from the two subcommittees of the whole which were set up at our meetings on May 7.

Reports of Legal and Technical Subcommittees

Since we are about to complete our work, I think it is appropriate to comment briefly on the reports of these two subcommittees.

Turning first to the report of the legal subcommittee, let me point out several valuable contributions which it makes.

First, the subcommittee noted that as a matter of principle the charter of the United Nations and the statute of the International Court of Justice are not limited in their operation to the confines of the earth.

Second, it observed that there may be in the process of development a rule that, in principle, outer space is, on conditions of equality, freely available for exploration and use by all in accordance with existing or future international law or agreements.

Finally, after agreeing that a comprehensive code of space law is not now practicable or desirable, the legal subcommittee drew up a useful survey of legal problems in connection with outer space programs, distinguishing between those questions which appear to call for priority treatment and matters which may be dealt with at a later stage.

The technical subcommittee for its part has drawn up a scientific report which the layman can understand. It gives us the elementary technical background against which future scientific activities in outer space must be considered. It goes on to set forth certain problems, to describe certain possibilities, and to suggest certain areas where international cooperation now can contribute to progress.

I wish also to emphasize that this committee urged that priority be given to considering the problem of allocation of radio frequencies for use in connection with space vehicles.

Finally, it concluded that "There is need for a suitable center related to the United Nations that can act as a focal point for international cooperation in the peaceful uses of outer space."

Both subcommittees quite wisely recommended that the General Assembly arrange to keep all these matters under continuing review, a point which the United States endorses.

Secretary-General's Report

Paragraph 1(a) of the Assembly's resolution also asked this committee to report on the activities and resources of the United Nations, its specialized agencies, and other international bodies relating to the peaceful uses of outer space. The Secretariat has ably performed this task. The United States regards the document on this topic as a useful contribution to our work and will study it carefully. Meantime I wish

to reserve the right to make further comments on it. It will be of interest to all members when they see the present extent of international cooperation in this field, both as a result of the program during the International Geophysical Year and work on particular aspects of space activities going on in the specialized agencies. The United States believes that it will be useful if the United Nations can continue to be informed about such activities.

On the basis of these reports the *Ad Hoc* Committee can now consider the remaining task before it, which involves "The future organizational arrangements to facilitate international cooperation in this field within the framework of the United Nations."

Appraisal of Final Committee Report

The United States considers that the working paper before the committee (document A/AC.98/4) covers this final aspect of our work in a satisfactory way. We agree fully that it is premature at this stage to consider the establishment of an autonomous intergovernmental organization but that this question should remain under review. None of us now can foresee how rapid the scientific advances in the challenging new field of outer space may be.

The United States believes that the *Ad Hoc* Committee was wise to describe in this section of its report the various possible organizational arrangements within the framework of the United Nations.

The working paper goes on to describe the functions that might be undertaken within the framework of the United Nations on the basis of the work of the technical and legal subcommittees. It then suggests various ways in which these functions might be carried out.

It singles out certain functions which are properly subjects for consideration and action by governments and suggests in this connection that the General Assembly may wish to consider the establishment of a committee of states with such members as it may decide. The United States remains convinced that subjects of the character this committee has been considering require consideration and actions by governments if genuine progress is to be made.

Certain functions of a more limited character might also be entrusted to the Secretary-General. In his work he might find it helpful to have the assistance of a small advisory committee which could include representatives of the interested specialized agencies, other specially qualified individuals, including key scientists, and member states, as necessary.

In conclusion, let me say a few words about the report as a whole. The United States regards it as an extremely useful examination of relevant material in this challenging new field. In days to come it may well be pointed out as the historic first contribution of the United Nations to the establishment of international cooperation in the peaceful uses of outer space.

In appraising the value of this committee and of its work I believe we can say that it has provided guidance which will facilitate the rapid and orderly realization by *all* mankind of benefits which technology promises to unlock in outer space.

THE INTERNATIONAL GEOPHYSICAL YEAR IN RETROSPECT

(Excerpts from an article by Wallace W. Atwood, Jr., Director of the Office of International Relations of the National Academy of Sciences—National Research Council in The Department of State Bulletin, volume 40, pages 632-638, May 11, 1959.)

On December 31, 1958, the International Geophysical Year, widely known as the IGY, came to an end. For a period of 18 months starting on July 1, 1957, and throughout the five years of planning that had gone before, a unique example of international cooperation was given to the world. In spite of national rivalries, ideological tensions, and wars both hot and cold, scientists of East and West—and those of neutral nations in between—pooled their skills and their learning to push out the frontiers of knowledge for the benefit of all mankind. Through their concerted efforts quantities of basic scientific data were gathered, which will form the basis of future research projects for years to come. Important new discoveries were made regarding man's environment, the earth itself, the oceans, and the atmosphere. Through the launching of artificial earth satellites the IGY brought man to the threshold of a new era of exploration: the exploration of outer space.

To bring all this about required the services of some 30,000 scientists and technicians and as many amateur observers, representing most of the nations on earth. Some 4,000 primary sites and several thousand auxiliary ones covered every part of the world, extending from pole to pole and reaching into many hitherto inaccessible spots. Expeditions went to some of the farthest reaches of the globe, and scientists from countries whose political leaders were snarling at each other worked on in amity, like the United States and Soviet Union weathermen who jointly staffed meteorological stations in the Antarctic.

Although the IGY was conceived and carried out by scientists working through their nongovernmental international organizations, the success of the undertaking depended in large measure on the support given by governments all over the world. To a greater or lesser extent, public funds were used to finance the various national IGY programs. In many instances governments provided logistics for material and personnel. And each cooperated by facilitating the necessary exit from one country and entry into another of scientists engaged in the work and expedited the movement through customs and other national barriers of scientific equipment to be placed and utilized abroad. In these ways governments actively participated in the IGY.

The precedents for the International Geophysical Year were the First Polar Year of 1882-83 and its successor, the Second Polar Year of 1932-33. In 1950 a proposal was made that another period of international and interdisciplinary research be scheduled at the 25-year interval (1957-58) instead of the 50-year interval. There were three good reasons for this advance scheduling: (1) The warehouse of basic data essential to progress in science was nearly empty; (2) travel at supersonic speeds and the rapid development of new communications systems posed problems which required basic information concerning the earth, the oceans, and the upper atmosphere; and (3) a period of unusual activity on the surface of the sun was predicted for 1957-58, which

would provide an excellent opportunity to observe some of the phenomena that affect man's environment on planet earth.

Role of International Council of Scientific Unions

Planning went forward under the guidance of the International Council of Scientific Unions (ICSU). This is a non-governmental organization which helps to coordinate activities in international science. It comprises 13 international scientific unions, from which it takes its name, together with 45 member nations, each represented by a suitable adhering organization. Generally, the adhering national unit is the national academy of science or research council or a similar body; for the United States it is the National Academy of Sciences.

Impact of the IGY

The launching of satellite vehicles during the IGY as scientific probes into space opened a new era of exploration and discovery. At this stage scientists are still gathering information—information that adds to an understanding of the origin of the solar system, perhaps of matter itself. A long step beyond, but nevertheless a step no longer out of reach or sensible thought, is man's own penetration of new worlds, at least of the moon and the nearby planets. How far in the future this development lies is not yet clear, but the use of experimental animals in recent test flights suggests that the first space trips by man may be imminent.

The stimulation to thought and imagination which has come with the opening of new horizons through the IGY has few parallels in recent history. It has renewed interest in study and research, and more people have come to recognize the importance of pure science, not just its applications in technology. In the United States the educational system is responding to the impetus generated by the IGY.

It has been suggested in high tribunals that the IGY has provided a pattern of international cooperation which should be emulated. If this is true, it is because the scientists involved were men of good will and because they developed together the procedures necessary to achieve their common objectives. At no time did the scientists allow political differences to block their course. Through their national academies and other scientific institutions they interested their respective governments in the IGY plans and obtained the cooperation and financial support which they required. In this manner the IGY scientists developed a team which possessed the strength and prestige necessary to carry through the most ambitious program of scientific exploration the world has ever known.

These well-tested methods, developed by ICSU and its unions and so effectively employed during the IGY, are ideally suited for the furtherance of international cooperation in science. For this reason it may be hoped that the United Nations and its specialized agencies, when they contemplate the initiation of international scientific activities, will call upon organizations such as ICSU for advice and assistance. If this should happen, the IGY, in addition to making a significant contribution to science and human welfare, will have brought to the United Nations a valuable tool for the conduct of international scientific relations.

PROMOTING BETTER UNDERSTANDING BETWEEN THE UNITED STATES AND ASIA

(Excerpts from an address by Deputy Under Secretary of State Robert Murphy before the Japan-America Society of Washington at Washington, D. C., March 25, 1959, as carried in The Department of State Bulletin, volume 40, pages 512-514, April 13, 1959.)

Our meeting today coincides with a number of developments in the international field which are of interest to Japan-American relations.

Last September we were suddenly faced by a heavy bombardment from the mainland of the offshore island positions held by the forces of the Republic of China. This abrupt orchestration of military force followed shortly after a visit to Peiping by the Soviet Chairman of the Council of Ministers, Nikita Khrushchev. It was accompanied by a barrage of radio broadcasts from Peiping which left little doubt that it was part and parcel of a campaign designed to drive the Republic of China forces not only from the offshore positions but from Taiwan. Implicit in the broadcasts was the repeated suggestion that United States forces should be driven from the Western Pacific.

Voices then were heard in different world areas expressing the notion that it would be foolhardy to risk war over the insignificant offshore positions because geographically they seemed to form a natural part of the mainland of China, even though they had never been in the possession of the present Peiping regime. Better judgment, however, prevailed, and by steadfast courage and determination the positions remained intact.

What is interesting in this experience, however, is a certain similarity between those critics of a firm stand on the question of resistance to force and aggression as a means of solution of problems and the more recent issue of Berlin. It is true that the issues are not identical. In the Far East problem concerning the offshore islands and Taiwan, the conflict arose between the opposing Chinese elements. The Berlin issue was provoked directly by the Soviet Union as one of the four occupying powers exercising rights and responsibilities of military occupation resulting from military conquest.

But the point of similarity I have in mind is that, when an atmosphere of crisis developed in the first instance by military action was provoked by the Communist regime in Peiping, there was a small chorus of hasty reaction to the effect that we should not risk generalized conflict over the insignificant island positions; that it was the part of caution and prudence to yield to this type of forcible aggression in violation of the spirit of the United Nations Charter in the general interest of peace. The implication was that, if the free world yielded on this issue, the crisis would pass and there would be peace in the Western Pacific. This thesis was stoutly asserted by some in the face of the Peiping declarations that their intent and purpose continued to be the conquest of Taiwan.

Likewise, in the case of the Berlin issue, we have heard in these past weeks similar voices, sometimes the same voices, urging that the free world abandon its rights and responsibilities in West Berlin on the

theory that it would be foolhardy to risk generalized war over the Berlin issue.

Actually these voices overlook the fact that what is at stake is not only our rights in West Berlin, including peaceful access to it, but also the very freedom of the two and one-quarter million men, women, and children of West Berlin.

Inherent in these attitudes on both issues—and I am glad that they are by far small minority attitudes—is an assumption that to yield on an issue under such circumstances of application of force or the threat of force where a given issue is described as insignificant or of small importance would be the happy solution; that there would be an end of pressures—a sort of peace-in-our-time idea—and that the world would be able to relax and devote itself to the peaceful pursuit of improved living conditions and the enjoyment of the fruits of our labors.

Unfortunately we have learned, as a result of our experiences since World War II, that this type of easy concession under pressure of intimidation and force does not promote the chances of enduring peace. On the contrary it only encourages further unreasonable demands and leads to further crisis. This is because it is quite clear that the leadership of the international Communist movement is not content with small local gains. These are but steppingstones in a program of larger domination. Thus we know that in the European situation the Soviet objective is not merely the local question of four-power occupation of the City of Berlin or the technical questions of access but the larger question of a Germany subservient to external *diktat.* Thus Mr. Molotov was fond of saying "as goes Germany, so goes Europe."

Time for Creative Diplomacy

Thus we are faced with another in what is no doubt a series of provocations of critical issues which the free world is called upon to meet. In the present case I think there is cause for a great deal of satisfaction in the steadfast manner in which the West is meeting an exceedingly complex and difficult problem. There is no doubt great wisdom in the efforts of the Western leadership to thoroughly explore the issue in a series of negotiations and consultations which will leave no stone unturned in the quest of a peaceful solution. This is a fine example of courageous statesmanship which is not harnessed to sterile notions of a *status quo* but one in which imagination is at play to progress and to use all the apparatus of negotiation and diplomacy which can be brought to bear in this kind of a situation.

CONFERENCE RESULTS ARE INCONCLUSIVE

The Foreign Ministers of the United States, Great Britain, France, and the Soviet Union closed their ten-weeks' session at Geneva on August 5.

Results of the conference which was called to consider the Berlin situation, caused by the demand of the Soviet Union that the Western powers leave that city, were listed as inconclusive.

STATEMENT BY DR. STEVER

(Excerpts from a statement by Dr. Guyford Stever, of the faculty of the Massachusetts Institute of Technology, as carried on pages 184-186 of "The Next Ten Years in Space, 1959-1969," Staff Report of the Select Committee on Astronautics and Space Exploration, House of Representatives, Washington, D. C., February 3, 1959.)

The first decade of the Space Age will see space scientific research firmly established, with many important results obtained before the end of the decade, and with a host of techniques developed for carrying out new important scientific experiments. It will also be marked by the beginnings of manned exploration of the nearer reaches of the solar system and by important applications of space technology to man's daily life.

Manned Space Flight

Though man will successfully fly in space in a very few years, the first decade of the Space Age will probably be one of acquiring capability in manned space flight, rather than great accomplishment in the more difficult flights of man to the moon and the planets. By the end of the decade, the capability should be so good that the second and ensuing decades can be characterized by long-range expeditions and elaborate exploration missions.

HOPE FOR BETTER UNDERSTANDING

President Dwight D. Eisenhower in making announcement at a press conference held on August 3 of the exchange of visits between Premier Nakita Khrushchev, of the Soviet Union, and himself expressed the hope that the visits would serve to create better understanding between the United States and the Soviet Union and would promote the cause of peace.

MEMBERS OF THE UNITED NATIONS

There are eighty-two members of the United Nations, as of the date when this bulletin goes to press. The list of members is as follows:

Afghanistan, Albania, Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Burma, Byelorussian SSR, Cambodia, Canada, Ceylon, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia.

Denmark, Dominican Republic, Ecuador, El Salvador, Ethiopia, Finland, France, Ghana, Greece, Guatemala, Guinea, Haiti, Hashemite Kingdom of Jordan, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel.

Italy, Japan, Laos, Lebanon, Liberia, Libya, Luxembourg, Malaya, Mexico, Morocco, Nepal, Netherlands, New Zealand, Nicaragua, Norway, Pakistan, Panama, Paraguay, Peru, Philippine Republic, Poland.

Portugal, Romania, Saudi Arabia, Spain, Sudan, Sweden, Thailand, Tunisia, Turkey, Ukrainian SSR, Union of South Africa, U.S.S.R., United Arab Republic, United Kingdom, United States, Uruguay, Venezuela, Yemen, and Yugoslavia.

REFERENCES

For material concerning the United Nations, the principal or teacher in charge should write the Department of Public Information of the United Nations, United Nations, N. Y.

The United States Mission to the United Nations will no doubt be able to furnish some material of value to those who are making a study of the Program topic. The principal or teacher in charge should write for available material to the U. S. Mission to the United Nations, 2 Park Avenue, New York 16, N. Y.

The Department of State will no doubt be able to furnish some material of value to those who are making a study of the Program topic. The principal or teacher in charge should write for available material to the Public Services Division, Department of State, Washington 25, D. C.

The November, 1953, number of the University of North Carolina Extension Bulletin deals with the subject: "Building World Peace: How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?" The price of this publication, which was used as the handbook for the Program of 1953-54, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The September, 1954, number of the University of North Carolina Extension Bulletin deals with the subject: "The Role of the United Nations in the Building of World Peace." The price of this publication, which was used as the handbook for the Program of 1954-55, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The November, 1955, number of the University of North Carolina Extension Bulletin deals with the subject: "The Future of the United Nations in Helping to Build World Peace." The price of this publication, which was used as the handbook for the Program of 1955-56, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The September, 1956, number of the University of North Carolina Extension Bulletin deals with the subject: "The United Nations—Its Problems and Opportunities." The price of this publication, which was used as the handbook for the Program of 1956-57, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The October, 1957, number of the University of North Carolina Extension Bulletin deals with the subject: "The United Nations in the Search for World Peace." The price of this publication, which was used as the handbook for the Program of 1957-58, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

The September, 1958, number of the University of North Carolina Extension Bulletin deals with the subject: "The Role of the United Nations in the Modern World." The price of this publication, which was used as the handbook for the Program of 1958-59, is 50 cents a copy. Address the University Extension Division, Chapel Hill, N. C.

U. S. Senators and Representatives in Congress may be able to furnish from Congressional sources some material bearing on the subject for the year.

FILMS ABOUT THE UNITED NATIONS

The Bureau of Visual Education of the University of North Carolina Extension Division will be able to supply a number of films dealing with the United Nations or related topics to schools, clubs, or other organizations. For rental rates, address the Bureau of Visual Education, Abernethy Hall, Chapel Hill, N. C. A partial list of the films is given below:

"The Middle East (Israel)," running time 10 minutes.

"Factories, Mines and Waterways (Western Europe)," running time 20 minutes.

"Assignment Children" (Danny Kaye's World Tour for UNICEF), running time 20 minutes, color.

"Brotherhood of Man," running time 10 minutes, color.

"Japan, Island Nation," running time 20 minutes.

"Defense of the Peace, UN," running time 10 minutes.

"World Without End," running time 39 minutes.

"Workshop for Peace," running time 28 minutes.

"Middle East," running time 14 minutes.

"Out" (Hungarian Refugees), running time 20 minutes.

"Three, Two, One, Zero," running time 27 minutes.

"Eight Steps to Peace Series," a series of eight films, each with running time of 13½ minutes, dealing with "Membership in the UN," "You and the UN," "A Permanent UN Police Force," "Charter Review," "What's in It for Everyone?," "Does Disarmament Make Sense?," and other subjects.

WORLD AFFAIRS INFORMATION CENTER

The University of North Carolina Extension Division operates a World Affairs Information Center. The services of the Center at Chapel Hill include: the distribution of State Department and United Nations literature about the Organization and its specialized agencies (i.e., UNESCO, FAO, WHO, etc.); the rental of films, film strips, and other audio-visual education materials; and other activities.

The Information Center, in cooperation with the University of North Carolina Library, assists North Carolina public and school libraries in providing local World Affairs information services. In addition to the distribution of State Department and United Nations informational materials to the libraries, lists of other publications related to international affairs are provided and, if possible, furnished by the Center.

Requests for information should be addressed to the World Affairs Information Center, University Extension Division, Box 1050, Chapel Hill, N. C.

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Announcements for 1959-60

AUDIO-VISUAL MATERIALS FOR SCHOOLS, COLLEGES, CHURCHES, AND ADULT STUDY GROUPS

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Foreword

The effectiveness of Audio-Visual Aids as important tools in instruction has been amply demonstrated not only in our schools but throughout business, industry and our military services as well.

The services of the Bureau of Audio-Visual Education of the Extension Division of the University of North Carolina in serving as a depository, in counseling on the use of audio-visual aids and in developing a magnetic tape service which will make available authentic programs in foreign languages, music, science, mathematics, literature and mental health can prove to be of inestimable value to the public schools of North Carolina.

State Superintendent of Public Instruction

This catalog has been prepared in collaboration with the staff of the Bureau of Audio-Visual Education.

KENNETH M. MCINTYRE, *Director*

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SPECIAL ANNOUNCEMENT

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PLAN III	150	units	Audio-Visual	Aids	150.00

Note. ALL CLUB PLANS are on a *twelve month* basis—that is, Audio-Visual Aids may be used under a CLUB PLAN for 12 months beginning with the date of first delivery. TRUCK DELIVERY PLANS are based on the nine months school year.

NOTE: 25% increase in all daily rental rates since catalog went to press. Rates listed by film titles are in error. (For example, a 3 unit film is now $2.25 for one day's rental instead of $1.80 as listed.)

Alphabetical List of 16mm. Educational Films With Description, Price and Unit Value

Unit Value

ACCENT ON USE (NatFdInfant Par)

20 minutes—sound $1.20 2
Shows the techniques of physical therapy and their importance in the treatment of infantile paralysis. (Sr. High through Adult)

ACT YOUR AGE (CORONET)

13 minutes—sound $2.40 4
Students will see here some of the more common types of "infantile reaction"—temper, weeping, inability to "take a joke" as well as other forms of emotional immaturity. And, having seen examples of these traits, they'll learn the basic reasons for the continuance of these common signs of emotional immaturity into adolescence. To help overcome the social handicaps that come with inability to "grow up" the film offers a method of self-evaluation. (Jr. High through Adult)

ADAMS, JOHN QUINCY (EBF)

20 minutes—sound $2.40 4
Dramatizes significant episodes in the life of America's sixth president and "Father of American Foreign Policy." Traces the steps by which he laid the groundwork for the expansion of the U. S. across the entire continent. (Jr. High through Adult)

ADDITION IS EASY (CORONET)

10 minutes—sound $1.80 3
What is addition? How is it done? Billy needs to buy a set of paints but he wants to buy a baseball bat too. Has he enough money in his own bank? This simple and effective film lesson establishes the basic concepts and demonstrates the methods of addition which are all-important to a solid foundation for the study of mathematics. (Primary and Elementary)

ADVENTURES OF BUNNY RABBIT (EBF)

10 minutes—sound $1.80 3
Dramatizes for primary children the adventures of a mother rabbit and her family in their natural environment, explaining the rabbit's habits and characteristics. (Primary and Elementary)

ADVENTURES OF HUCKLEBERRY FINN (TFC) **(See regulations—last page)**

39 minutes—sound $4.80 8
Digest of the major episodes in the Twain narrative of Huck's flight from home, his journey down the Mississippi with Jim, the runaway slave, and their encounter with the fraudulent "King Louis the VII" and the "Duke of Bridgewater." Loyalties are stressed as well as the humor and pathos of Twain's classic. (Elementary through Adult)

ADVENTURES OF JUNIOR RAINDROP (USDA)

8 minutes—sound—color $1.20 2
Animated cartoon of a raindrop's visit to earth. Shows the need

Unit Value

for everyone to be informed on good watershed management practices. Raindrops, like children, become delinquent and lawless when their welfare is neglected. The animation is supplemented with "live" action scenes showing contrasting results of poor and good watershed management.

ADVENTURES OF WILLIE SKUNK (YA)

10 minutes—sound $1.80 3

The amusing story of Mother Skunk and her five babies, featuring Willie Skunk, the baby who always seems to be getting into difficult situations. (Primary)

ADVENTURING PUPS (YA)

10 minutes—sound $1.80 3

The story of three beagle puppies and their adventures on the farm and in the woods. Serves to stimulate observation by the pupil and introduce him to the characteristics and actions of dogs and several other animals of the woods and farm. (Primary)

AFRICAN FAUNA (PAUL HOEFLER)

10 minutes—sound—color $3.00 5

This beautiful, interesting, and instructive film was photographed just before the war by this internationally recognized African authority. It shows the animals: Waterbuck, Impalla, Chettah, Crocodile, Elephant, Zebra, Lion, Giraffe, all in their natural habitat.

AGE OF DISCOVERY (CORONET)

10 minutes—sound $1.80 3

Spanish and Portuguese Explorations. Map animations, scenes of Spanish and Portuguese towns and places connected with the "age of discovery," and shots of statues, paintings and other objects of historic interest which combine to present a picture of the men, the ships, and the instruments used. Reference is made to the voyages of Prince Henry the Navigator, Columbus, Vasco Da Gamma, Magellan, and the Conquistadores. (Elementary through Adult)

AIR ALL AROUND US (YA)

10 minutes—sound $1.80 3

This film presents and explains a number of classroom demonstrations illustrating concepts concerning air pressure, contraction and expansion of air, and compressed air. (Elementary and Junior High)

AIRPLANE CHANGES OUR WORLD MAP (EBF)

11 minutes—sound $1.80 3

Describes the evolution of world map concepts and how the airplane has drastically reduced travel distances. Sequences include the problem of projection distortion; early maps and globes; latitude and longitude; Mercator's, Mollweide's, and Goode's projections; and distance contrasts between points on the globe by land, water and air travel routes. The Great Circle route is traced on Mercator's projections, and airplanes and steamship travel distances are compared. (Elementary through Adult)

Unit Value

AIRPLANE TRIP (EBF)

11 minutes—sound $1.80 3
A mother and her young daughter journey to Salt Lake City from Los Angeles in an airplane. They see parts of the plane serviced; mail and passengers taken on; the safety belt adjusted, and the plane's instruments explained. They are served a meal, see the berths made up and hear a radio and telephone weather report. (Primary and Elementary)

AIRPLANES AND HOW THEY FLY (YA)

11 minutes—sound $1.80 3
An elementary discussion of the principles of aircraft flight. Also illustrates types of modern aircraft. (Elementary and Jr. High)

ALASKA (EBF)

10 minutes—sound $1.80 3
Developed to show the relationship of people living in Alaska to their environment and the tremendous reservoir of resources which Alaska comprises. Fishing, lumbering, mining, fur trapping and agriculture. (Elementary through College)

ALASKA—Eskimo Hunters (UWF)

20 minutes—sound $3.00 5
In this vivid film, we learn how people live in regions where the weather is always cold, chiefly by fishing, trapping and hunting. We live with an Eskimo family in northern Alaska where life is conditioned by this low temperature even in summertime. (Elementary through Adult)

ALASKA'S SILVER MILLIONS (AC)

34 minutes—sound $1.20 2
Fascinating story of salmon and the amazing land of Alaska. Shows the geographical setting and many scenic wonders. (Elementary through Adult)

ALCOHOL IN THE HUMAN BODY

15 minutes—sound $2.40 4
Uses both live photography and animation to show the specific effects of ethyl alcohol on the body. Describes the characteristics of the liquor, traces its course through the body and shows its effect upon the brain and actions of the imbiber. (Jr. High through Adult)

ALCOTT, LOUISA MAY (EBF)

20 minutes—sound $2.40 4
Portrays the life of one of America's great and popular women writers. Reveals her complete devotion to her family in the Civil War and mentions her aiding national reform and improvement measures. Emphasizes her success as a writer of human interest stories, with special attention to *Little Women, Little Men, and Jo's Boys.* (Jr. and Sr. High)

ALGEBRA IN EVERYDAY LIFE (CORNET)

10 minutes—sound $1.80 3
There is nothing mysterious about algebra. It is only a language of numbers. Your students will realize this as they see Grace and

Unit Value

Bill solve a problem confronting them in the preparations for their annual school revue . . . solve it by using algebra. With emphasis on three basic algebraic steps: 1) observation, 2) translation, 3) manipulation and computation, this film shows how algebra is used in everyday life. (Jr. and Sr. High)

ALICE IN WONDERLAND (TFC) (See regulations—last page)

40 minutes—sound $4.80 8
This excerpt gives a detailed presentation in costume of the leading characters of the book and photographs of the actors and actresses who portrayed them. Scenes show Alice in her living room examining the chessmen, commenting on the rabbit, talking to the turtle, her solioquy with the cat, walking through the looking glass, her trip down the rabbit hole, and eating the cake which makes her grow small. The film closes with Alice small enough to go through the doorway which takes her into Wonderland. (Elementary through Adult)

ALIMENTARY TRACT (EBF)

10 minutes—sound $1.80 3
Supplement to "Digestion of Foods." Treats motility phenomena of gastro-intestinal tract. Hypermotility, inhibition, anti-peristalsis, hunger contractions and normal movements are illustrated. (Jr. High through College)

ALLERGIES (EBF)

12 minutes—sound—black and white $1.80 3
Presents facts necessary for a fundamental understanding of the nature of allergies. Describes an allergy as a pronounced sensitiveness of a given part of the body to a particular substance such as certain pollens, dusts, foods, etc. Points out types of research now being carried on in the field, and explains tests for detecting allergies. (Jr. High through Adult)

ALUMINUM (OWI)

9 minutes—sound $1.20 2
A story of the "fateful metal"; importation of bauzite; transmutation into alumina and then into aluminum. (Jr. High through Adult)

AM I TRUSTWORTHY (CORONET)

10 minutes—sound $1.80 3
Returning borrowed articles, keeping promises, doing a good job with assigned tasks are all presented as examples of trustworthiness in this film. Students see and learn that by practicing trustworthiness in the little things of everyday life, people will trust them when important issues are raised. Trustworthiness is seen as a part of our daily routine. Use of this motion picture can do much to solicit the support of the class as a group in developing trustworthiness. (Primary and Elementary)

AMERICA FOR ME (BEAUMONT & HOHMAN)

35 minutes—sound—color $1.20 2
Tells the story of a young school teacher who is traveling across the country writing a thesis. The people she meets, the lovely scenery she sees, are combined with a light romance to give an in-

Unit Value

formative, colorful picture of America. Some magnificent scenic sequences are included in the film. A Greyhound Bus sightseeing tour. (All ages)

AMERICAN FLAG, THE (EBF)

13 minutes $2.40 4

Born as we fought for liberty, our flag grew with the nation. Here is the stirring dramatization—the march of events—out of which the stars and stripes have emerged as the emblem of our nation's independence and unity. (Elementary, Jr. and Senior High)

AMERICAN LITERATURE: COLONIAL TIMES (CORONET)

10 minutes $1.80 3

We see that the beginnings of literature in this country took the form of practical, useful documents, reflecting the natural wonders of the new world to which the settlers had come, and the hard pioneer life and deep religious faith of these people. Although the colonial period was not rich in literature as we know it today, it has been and still is an important source of literary inspiration to later American writers. (Junior High, Senior High, College)

AMERICAN LITERATURE: EARLY NATIONAL PERIOD (CORONET)

10 minutes $1.80 3

The first real literature of America is presented here in the writings of Philip Freneau, William Cullen Bryant, Washington Irving and James Fenimore Cooper, who found their subjects in the native scene, the natural beauty, the folk legends, the humor, and the traditions which were characteristically American. (Junior High, Senior High, College)

AMERICAN LITERATURE: REVOLUTIONARY TIMES (CORONET)

10 minutes $1.80 3

From this period emerged some of the most impassioned pleas for the natural rights of mankind ever produced by a people. The feeling, depth, and beauty of many of these political documents raise them to the level of true literature. This film brings to life some of the important writings of Benjamin Franklin, Patrick Henry, Thomas Pain and Thomas Jefferson. Junior High, Senior High, College)

AMERICAN LITERATURE: THE REALISTS (CORONET)

10 minutes $1.80 3

The scientific and industrial advance in America and its accompanying social and economic problems formed the background from which the realists emerged. This film discusses the writings of Upton Sinclair, Theodore Dreiser, Hamlin Garland, Stephen Crane, Jack London, Booth Tarkington, and Sinclair Lewis, and associates the theme of realism with many of our present-day novelists, poets, essayists and dramatists. (Junior High, Senior High, College)

AMERICAN PORTRAIT (Am. Life Ins.)

26 minutes—sound $1.20 2

The story of improvement and better ways of life which have come into being over the course of the last one hundred years. Barbara, a member of the Smith family is unimpressed with

Unit Value

the family's achievements, until Grandpa puts her straight by showing her how her own family helped sell America into a better way of life and the highest standard of living in the world. Shows the place of the life insurance salesman in the community. (Sr. High through Adult)

AMERICAN REVOLUTION (EBF)

12 minutes—sound—color $3.60 6

A clear explanation of the strategy, the struggle, the movement of forces, and the important military engagements of the war for independence. Stresses geographical and social factors which brought victory to the thirteen states. Animated drawings cover the terrain and battlefields over which the war was fought. (Sr. High through Adult)

AMERICAN REVOLUTION: THE BACKGROUND PERIOD (CORONET)

10 minutes $1.80 3

What caused the farmer, laborer, craftsman, merchant, and frontiersman to take up arms against the British? Each had his own reason, but they were all united in the common cause of freedom. This film treats the political, social, and economic conditions that formed the background of the American Revolution, and those events which forced the Colonists to rebel against their mother country. (Junior High, Senior High, College)

AMERICAN REVOLUTION: THE POSTWAR PERIOD (CORONET)

10 minutes $1.80 3

Out of the battles that began at Concord, the work to form a unified army, the sufferings of seven years of war; out of the victory and out of the experiences of seven years without a central government, came an enduring government—our Constitution. This film traces the steps that brought union to the independent states of America. (Junior High, Senior High, College)

AMERICAN REVOLUTION: THE WAR YEARS

10 minutes $1.80 3

The major phases of the American Revolution—its proclamation at Independence Hall, its crisis at Valley Forge, its turning point at Saratoga, its climax at Yorktown, its victory made possible at Paris, and its achievement in the alliance of colonies that followed the war. The film stresses the efforts and successes of George Washington, both as a great general and as the leader of his people. (Junior High, Senior High, College)

AMERICANS ALL (OIAA)

20 minutes—sound $1.20 2

A story of the life of the people in the twenty American republics south of the Rio Grande. Emphasizes need for good relations between the U. S. and Latin Americans. (All Ages)

AMERICA'S CALL TO ARMS (C)

10 minutes—sound $1.80 3

Technique of mechanized warfare; tanks, scout cars, anti-tank and anti-aircraft guns, air bombing, parachutists, and the new mosquito flotilla. (Jr. High through College)

Unit Value

AMERICAN SQUARE DANCE (CORONET)

11 minutes—sound—color $3.60 6

Teaches the positions of the dancers in relation to the calls and defines terms. We see (1) the Swing, (2) the Alemande, (3) the Grand Right and Left, (4) the Promenade, (5) Promenade the Outside Ring, (6) Right and Left Through and Back, (7) Two Ladies Chain and Back, (8) Four Hands Up and Half Around, and (9) Do-si-do. There is ample review of these fundamentals. (Elementary through Adult)

AMERICAN TEACHER (MOT)

15 minutes—sound $1.80 3

The basic theme is that all good teachers know their methods are as individualistic and personal as any other artists, and all realize the importance of developing in their pupils the ability to think, as well as a knowledge of the facts. (Sr. High through Adult)

AMERICA'S WONDERLAND (C)

10 minutes—sound $1.80 3

Niagara Falls, Rocky Mountain national park, the Yellowstone, Crater Lake, the Columbia River, Bryce and Grand Canyon, the Yosemite, Mount Rainier, the Monterey Peninsula all are shown. (Elementary through Adult)

ANCIENT GREECE (CORONET)

10 minutes—sound $1.80 3

Primarily photographed in Greece, the film is an authentic document. It offers an ideal dramatization of one of the most important periods in human history, showing the Parthenon, the village of Sparta and the Acropolis. (Junior and Senior High)

ANCIENT MESOPOTAMIA (CORONET)

10 minutes—sound $1.80 3

The contributions of the Sumerians, Semites, Babylonians and Assyrians, who occupied the Tigris-Euphrates valley, are depicted against authentic locales that include, Babylon, Ur and Nineveh. These people were first to use the arch and the wheel. They developed a code of laws, a system of writing and military science —all of which have become a part of western civilization. (Jr. High through Adult)

ANCIENT ROME (CORONET)

10 minutes—sound $1.80 3

As a city, as a religious center, as a capital of an Empire, Ancient Rome dominated the people of its times. Even in our modern world the Roman influence is profound. In this production an authentic visual background is presented for the study of Ancient Rome. The achievements of Rome in government, in architecture, in engineering, are presented here . . . our specific inheritances from the culture are established. The famous Appian Way, the Sacra Via, the Forum and the palaces of the Palatine Hill are just a few of the scenes of Roman grandeur presented. (Elementary through Adult)

Unit Value

ANCIENT TRAILS IN NORTH AFRICA (UWF)

10 minutes—sound $1.80 3

This film traces the known and conjectured history of ancient man thru ancient Rome, Carthage, and the Berbers, back to the trodiodytes and their shadowy paleolithic predecessors. The work of Count Bryon, noted archaeologist, is fascinatingly presented. (Jr. High through Adult)

ANCIENT WORLD INHERITANCE (CORONET)

11 minutes—sound $1.80 3

The study of ancient civilizations can well begin with the relationship of modern times to the Ancient World. By a visual comparison of the ancient with the modern the film shows how such everyday articles as textiles, paper, agricultural implements, and such institutions as writing and organized law are inherited from the cultures of the Egyptians, Babylonians, Assyrians and other ancient peoples. (Jr. High through Adult)

AND SO THEY LIVE (NYU)

25 minutes—sound $3.00 5

The tragic poverty of the land in a rural southern community, the lack of proper diet, housing and sanitation, and the need for better adaptation of the school program to the problems of the community. There is a detailed and intimate picture of the family, the real affection and respect among the family members emerging as clearly as the unfortunate social and economic circumstances in which they live. (College and Adult)

ANDES, THE (HFE)

10 minutes—sound—color $3.60 6

The Andes are shown as a distinct region of South America. Its effect on agriculture—nitrate and mineral resources—is depicted. Its barrier aspects are discussed in relation to trade and industry. Railway, roads, and airplanes each demonstrate their ability to cross the mountain chain. Excellent maps and charts show major geographic sectors of South America and the effect of the Andean mountain barrier on rainfall patterns. (Elementary through Adult)

ANDY AND THE LION (WestonWoods)

10 minutes—sound—color $3.60 6

"Inconographic" film using pictures and text from James Daugherty's picture book inspired by "Androcles and the Lion."

ANIMAL BREEDING (EBF)

13 minutes—sound—black and white $1.80 3

Essential procedures in animal breeding or genetics are shown in operation at an up-to-date breeding farm. Techniques of selecting parent stock are described, and examples of inbreeding and outbreeding shown. Identifies the unusually important pioneering roles of Robert Bakewell and Gregor Mendel. Explains the importance of artificial insemination. Outlines the major producer and consumer benefits derived from modern stock breeding procedures. (Biology and General Science)

Unit Value

ANIMALS GROWING UP (EBF)

10 minutes—sound $1.80 3

Traces growth and development of representative baby animals during the first few weeks of life. Animals depicted include a litter of puppies, a new born calf, and a hatching of chicks. The film illustrates how mother animals care for their young, and excellent close-up scenes portray clearly the physical changes taking place in the young animals at intervals of several days and weeks. (Primary and middle grades)

ANIMALS IN WINTER (SBF)

11 minutes—sound $1.80 3

Provides an opportunity to study various wild animals as they prepare for and live thru the winter season. Portrays a badger, woodchuck, chipmunk, caterpillar, owl, rabbit, bluejay, porcupine, bobcat, and fox in natural settings. (Primary and Elementary)

ANIMALS IN MODERN LIFE (EBF)

10 minutes—sound $1.80 3

How animals are used in our modern civilization to furnish food clothing, material, and power. (Jr. and Sr. High)

ANIMALS IN THE ZOO (EBF)

10 minutes—sound $1.80 3

Animals of the zoo and foods they eat. Includes lion, tiger, giraffe, bison, sea-lions, bears, hippopotamus, rhinoceros, elephant, monkeys, and bears. (Primary and Elementary)

ANIMALS—WAYS THEY EAT (EBF)

11 minutes—color $3.60 6

Through close-up photography this film offers a fascinating study of how animals and insects catch and eat their food. (Primary, Elementary)

ANIMALS—WAYS THEY MOVE (EBF)

11 minutes—color $3.60 6

Through close-up photography we are able to observe animals in their natural habitats, seeing how each animal makes use of individual means of locomotion. (Primary, Elementary)

ANIMULES (IntFlmB)

11 minutes—sound—color $3.60 6

Designed to encourage children's creativeness to have full play in making entirely imaginary animals out of wet paper, paste and tempera paints. Methods of constructing several basic forms are outlined and possible variations suggested by adding buttons for ribbon or yarn in many combinations. The importance of originality is stressed throughout the film. (Elementary through Adult)

ANOTHER TO CONQUER (TB)

22 minutes—sound $1.20 2

Portrayal of a cross-section of Indian life. This film about the tragedy of T.B. in an Indian family makes one realize the sorrows that might be avoided if the disease were taken care of in time. (Sr. High through Adult)

Unit Value

ANSWERING THE CHILD'S WHY (EBF)

13 minutes—sound $1.80 3

Dramatizes actual situations in which youngsters meet with positive or negative attitudes toward their questions, and suggests the resulting effect on their personalities. (Jr. High through Adult)

ANT CITY (ALMANAC)

11 minutes—sound $1.80 3

The complex society of ants is laid before our eyes. Their architecture, social and economic perfection, ability to organize and control their habits, work and detailed activities are revealed. (Primary through Adult)

ANTIBIOTICS (EBF)

14 minutes—sound—black and white $2.40 4

Provides basic understanding about a new and important weapon in man's fight against disease. Defines antibiotics and shows how they have been used successfully in medicine. Points up research in the development of antibiotics and calls attention to the mass production of penicillin. Also indicates use of antibiotics in animal husbandry and food preservation. (Jr. High through Adult)

APACHE INDIAN (CORONET)

10 minutes—sound—color $3.00 5

The once war-like Apaches remain one of our most colorful tribes. Their ceremonies are little changed through the years, and through this film we attend the most exciting of them. We see the Apache demonstrate his magnificent horsemanship and his love of pageantry and display in tribal functions. It's the tribe of Geronimo—following a more peaceful path. (Primary through Adult)

APHIDS (EBF)

11 minutes—sound $1.80 3

This film deals with a very interesting creature. It shows that most aphids have no father or even grandfather. Some are born alive, while others hatch from eggs; only a few have wings. Ants keep them as cows, while the aphid itself secures its food in an unusual way. Animated drawings of the aphid's life cycle. (Elementary through College)

APPIAN WAY (AFFlms)

10 minutes—sound $1.20 2

A camera trip along the Appian Way in Italy shows E. R. P. aid working in dozens of important ways, helping the Italians in their construction of a new and better Italy. (Sr. High through Adult)

APPRECIATING OUR PARENTS (CORONET)

10 minutes—sound $1.80 3

With more and more time now being devoted to developing good family relationships, this film can play an important role in any group activities. In a simple story it tells how a boy discovered how much his parents do for him each day. He sees, too, how he can help repay them through showing his appreciation and by doing his share of the family work. Lessons of cooperation, importance

Unit Value

of the family and ways to share tasks in the home are presented in an easy-to-understand manner. (Primary and Elementary)

APTITUDES AND OCCUPATIONS (CORONET)

16 minutes—sound $2.40 4

Discusses six of the fundamental human abilities—mechanical, clerical, social, musical, artistic and scholastic and indicates how a student may, with the aid of school counselor, determine how much of each of these abilities he has. It also indicates broad fields in which certain combinations of abilities are required. (Sr. High and College)

ARABIAN CHILDREN (EBF)

15 minutes—sound $2.40 4

This film is about a family in the town of Saahab, Jordan. The father is a farmer, the mother is a housewife. They have two sons and a daughter. In the morning, the son delivers sheep to the village shepherd, the other helps his father water their fig trees before they go to school. Then, while father works in the field and the mother makes the daily bread, the daughter gets water for the family and helps her mother. At school the boys learn English. As soon as school is out, the boys play around, help with the evening chores, go home and they all have dinner. (Elementary)

ARCHERY FOR GIRLS (CORONET)

10 minutes—sound $1.80 3

One of the most ancient of human skills, archery today is a fascinating and healthful sport for people of all ages. With experts demonstrating, students learn the fundamental techniques of shooting: proper stance, nocking the arrow, the draw, the aim, and the loose. Stressing relaxation and practice, it is popular with beginners and experts alike. (High School through Adult)

ARCHIMEDES PRINCIPLE (EBF)

6 minutes—sound $2.20 2

Dramatizes the problem that led to Archimedes' famous experiments on buoyancy. Recreates Archimedes' experiments under conditions that show the development of his Principle. Demonstrates the use of the modern Archimedes Balance with the cup and cylinder apparatus. Demonstrates experimentally the measurement of the buoyant force of fluid upon an immersed solid. (High School chemistry)

ARE MANNERS IMPORTANT? (EBF)

11 minutes—sound—black and white $1.80 3

The film shows how good manners, defined as consideration for others, help people live together in a pleasant, enjoyable way. We see a boy holding a door open for an older man laden with bundles, a man helping a woman into a car, a boy going to the end of the line at the movies instead of trying to crowd ahead of others, and other examples which illustrate consideration for others. The film ends by specifically posing the question—"Are Manners Important?" (Elementary and Jr. High)

ARE YOU A GOOD CITIZEN? (CORONET)

10 minutes—sound $1.80 3

Unit Value

Mr. Heineman has just been chosen to preside over the "Citizenship Day" celebration. And in this ever-timely film story we discover why he is considered such a good citizen . . . we are introduced to a check-list of good citizenship essentials . . . we learn a new appreciation of the role of democratic institutions in our way of life. This film will challenge every viewer to check up on his own citizenship rating. (Elementary through Adult)

ARE YOU POPULAR? (CORONET)

10 minutes—sound $1.80 3

Contrasts Carolyn, attractive newcomer in high school, with Ginny, who is willing to date all the boys but is unpopular with both boys and girls. Shows how Carolyn and Wally are careful of their appearance, polite, considerate in arranging dates, businesslike on the telephone, cooperative with parents, and always well mannered. (Junior High through Adult)

ARE YOU READY FOR MARRIAGE? (CORONET)

15 minutes—sound $2.40 4

"Is only *love* enough for marriage?" A young couple who want very much to get married discover what it really takes to be "ready for marriage." With the help of a church marriage counselor, they investigate their own relationship using his "Checklist For Cupid" and Marriage Development Board, which visualize the growing together of a couple before and during marriage with the achievement finally of paired unity. Church, social and educational groups will find this motion picture extremely useful in a variety of group and individual counseling situations. (Sr. High through Adult)

ARGENTINA (EBF)

11 minutes—sound $1.80 3

Buenos Aires, the commercial, financial, and industrial hub of predominantly agricultural Argentina. A grain broker and a packing plant employee, with the family of the latter, are introduced as representative city-dwellers. The vast pampas region, the source of Argentina's agricultural wealth; the dependence of the city on the rural hinterland. Spanish dialogue is periodically incorporated into the film story. (Elementary through Senior High)

ARGENTINA—Horsemen of the Pampas (UWF)

20 minutes—sound $3.00 5

In this film we accompany the son of a gaucho, who with his father attends all the day's work of the cowhand and at nightfall enjoys a comfortable home with others of the family. Throughout these scenes of the people of the Pampas there is an ever mounting impression of the vastness of the level, stoneless and nearly treeless plain. There is an inescapable picture of the Great Plain's influence upon its people and its impact upon an entire nation. (Elementary through Adult)

ARIZONA AND ITS NATURAL RESOURCES (BM)

30 minutes—sound—color $1.20 2

This film illustrates the development of the rich mineral deposits and other great resources of the Grand Canyon State. Highlights the development of copper and other metal industries, tells how irrigation turned desert wastes into rich agricultural regions and

Unit Value

provided good grazing land for cattle. Describes importance of Indian culture, and reveals how the painted desert, petrified forest and other natural wonders made Arizona a leading tourist state. (Jr. High through Adult)

ARM BEHIND THE ARMY (OWI)

10 minutes—sound $1.20 2

"The success of the Army on the firing line depends upon the success of labor and industry on the production line. And the security of American industry and labor depends upon the success of the Ameriacn Army. An Axis victory means the enslavement of both labor and industry." A positive appeal for unity. (Jr. High through Adult)

ARMY AIR FORCES REPORT (OWI)

40 minutes—sound $1.20 2

Shows how our Air Forces were organized and expanded, including the Fighter and Bomber Commands, the Air Transport Command, the Air Service Command, Nazi warning systems, anti-aircraft batteries; and fighter-plane operations are shown from the beginning of an Allied attack up to and including the actual sky combat between our own and enemy planes. (Jr. High through Adult)

ARMY-NAVY FOOTBALL GAME 1946 (AFS)

20 minutes—sound $1.20 2

Has opening scenes of the Annapolis Campus and the Midshipmen marching. Gives all of the highlights and best plays of this memorable game. (Jr. High through Adult)

ARMY-NAVY FOOTBALL GAME 1947 (AFS)

20 minutes—sound $1.20 2

Presents all of the most outstanding plays from the thrilling game. (Jr. High through Adult)

ART AND LIFE IN ITALY (CORONET)

10 minutes—sound—color $3.60 6

In this exciting overview of 2,000 years, students will see the art of Italy as the result of the activities of the Italian people in the land in which they live. They will stand on the streets of Florence, walk past the "Gates of Paradise" by Ghiberti, go into the Arena chapel in Padua to see Giotto's frescoes and view other historic Italian monuments and works of art. (Jr. High through Adult)

ARTERIES OF LIFE (Living Earth Series) (EBF)

10 minutes—sound—color $3.60 6

Points out the importance of water in providing topsoil with necessary moisture, and of forests in storing and regulating the flow of water over large areas. Clearly explains the water cycle and the water table, and describes nature's method of distributing life-giving water from forested areas, through the soil, into streams, and thence to drier areas miles away. (Jr. and Sr. High)

ARTERIES OF THE CITY (EBF)

10 minutes—sound $1.80 3

Clarifies elements which influence the development of a city's transportation facilities, including the distribution of residential

Unit Value

and business sections; the daily flow of people; transportation planning; subway, suburban train, ferry, bus, and automobile traffic systems; and police regulation. (Elementary through Sr. High)

ARTIFICIAL RESPIRATION (Seminar)

6 minutes—sound $1.80 3

A demonstration of the new back-pressure arm lift method of artificial respiration which has been adopted by many national organizations teaching first aid. Each step and the reasons for it is illustrated on an unconscious individual. (Jr. High through Adult)

ART IN ACTION SERIES (EBF)

Color

6 minutes—sound—color $1.80 3

In this film, children will explore new wonders of color in nature, in pigments, in yarn, clay, wood, and other art materials. Avoiding formal color harmonies, the film stimulates interest in experimentation, encourages children to "put" colors together in your own way. Makes them say what you want them to say. (Primary and Elementary)

Form

6 minutes—sound—color $1.80 3

The character of an object is revealed through its form. Young viewers, identifying themselves with the children in the film will enjoy playing the "What Is It " game with forms that have a name. Exploring the many different shapes to be found among everyday objects will create an awareness of the importance of form in the structure of art. (Primary and Elementary)

Line

6 minutes—sound—color $1.80 3

Variations in the qualities of lines may be found in nature—in lines on rocks, in lines on the back of a tiger, and in the trail lines made by a snail. Combining imaginative photography with animation, this film clarifies line movements and suggests to children the creative possibilities of materials such as thread, rope, and wire as well as paint, chalk, and crayon. (Primary and Elementary)

Texture

6 minutes—sound—color $1.80 3

The exploration of surfaces—hard, rough, soft, and smooth—provides a tangible approach to understanding textural qualities in art. Visual examples in the film will give youngsters a new appreciation of the textural effects which can be achieved with clay, metals, paper, linoleum, and other art materials. (Primary and Elementary)

Light and Dark

6 minutes—sound—color $1.80 3

In this film, striking camera studies in light, shadow, and gradations of color illustrate the meaning of values in art. Children are encouraged to find out, by experimentation with light and dark objects, what value is, what it does, and how it makes them feel. (Primary and Elementary)

ARTS AND CRAFTS OF MEXICO (EBF)

10 minutes—sound $1.80 3

Unit Value

In the fascinating background of Old Mexico, native craftsmen are shown in their home workshops. Spinning sheep's wool, the weaving of serapes (sleeveless coat-like blankets), basket-making, glass blowing, and pottery-making, each are treated in detail. (Elementary through Sr. High)

ASSASSINATION OF JULIUS CAESAR, THE (YA)

27 minutes $3.00 5

March 15, 44 B.C., Rome and the assassination of Caesar, portraying an event which sheds light on great personalities and foreshadows a change in the world of that day. Junior High through Adult)

ATACAMA DESERT (OIAA)

20 minutes—sound $1.20 2

Life and industry in the hot, dry Atacama Desert of northern Chile. Here are found the rich nitrate deposits for which Chile is famous. Modern mining methods are shown, and there is also an interesting study of the life lived by the people of this region. (Elementary through Adult)

A TALKING VALENTINE (EBF)

6 minutes—sound—color $2.40 4

Mrs. Jones is the safety-patrol lady at the school corner. All the children like her. She is fun, for she always speaks in rhyme. Linda, Jerry, and Mother make a valentine box for school. While the children make valentines at school, they see a parakeet apparently a lost pet, outside the window. He flies in and entertains the children with a rhyme which reminds them of Mrs. Jones. This is Mrs. Jones' bird. She comes for him as the children write a valentine to her expressing their love for her and the bird. (Primary)

ATOM AND INDUSTRY (EBF)

11 minutes—sound $1.80 3

Reveals how radioisotopes are providing new techniques of measurement and quality control in a wide variety of industries. Indicates how radiation is becoming a symbol of new procedures in factories and laboratories and how workers are learning to handle radioactive materials safely. Examines the problem of "atomic energy for industry." (High School Physical Science and Adult)

ATOM AND MEDICINE (EBF)

12 minutes—sound—black and white $1.80 3

Demonstrates how, by taking radioiodine internally, one man's condition was diagnosed and cured. Describes the important role of radioisotopes in hospitals, clinics, and doctors' offices. Clarifies misconceptions about the handling, dosage, and alleged dangers of radioisotope diagnosis and therapy. Shows the respect with which radiation must be treated and reveals some of the instruments and devices used to handle it. (Jr. High through Adult) (Hygiene)

ATMOSPHERE AND ITS CIRCULATION (EBF)

11 minutes—sound $1.80 3

The first part of the film gives a detailed presentation of the structure; the chemical composition; the gaseous nature; the distribution of air, the weight of air, altitude and pressure and tempera-

Unit Value

ture. The second sequence shows the circulation of the atmosphere as it would appear on an idealized globe without mountains or oceans. The circulation is explained in terms of the pressure bands surrounding the earth. The actual circulation or wind movements as affected by the earth's rotation is described in detail for winds near the surface and for winds aloft. (Jr. High through College)

ATOMIC ALERT (EBF)

10 minutes—sound $1.80 3
Illustrates the basic methods by which each child can best protect himself and others from the effects of an atomic bomb explosion whether he is at home, at school, or on the street. (Primary and Elementary)

ATOM AND BIOLOGICAL SCIENCE (EBF)

12 minutes—sound—black and white $1.80 3
Describes some of the biological effects of high energy radiations on plants and animal cells. Explains how typical experiments are conducted and demonstrates some of the protective measures required to insure the safety of the experimenters. Points out some possible applications of nuclear radiation to problems of human health, emphasizing work already underway in the study of cancer. (High School) (Physical Science and Adult Education)

ATOM SMASHERS (EBF)

12 minutes—sound—black and white $1.80 3
Describes how scientists are developing machines and techniques for the production and use of nuclear radiation in many fields. Calls attention to the importance of accelerators—particularly the cyclotron—and their contribution to nuclear research. Illustrates how the products of "atom smashing" are identified, and demonstrates measures taken against the dangers inherent in this research. (High School Physical Science and Adult)

ATOMIC ENERGY (EBF)

10 minutes—sound $1.80 3
Animated drawings explain parts and structure, the mass-energy relationship, and three ways of releasing atomic energy; nuclear synthesis, natural, radio-activity, and nuclear fission. The distinction between atomic energy and chemical energy is graphically explained and exemplified. Actual scenes of atomic bomb explosion are included. (College and Adult)

ATOMIC POWER (MOT)

19 minutes—sound $1.80 3
The film takes you back to 1905 when Einstein proved on paper that matter can be converted into energy, and unfolds the story of atomic power. It not only gives the facts and figures but in each of the re-enacted scenes are the actual scientists who performed the original experiments: Lise Meitner, Enrico Fermi, Albert Einstein, and others of equal importance. Shows the men who fathered the revolutionary weapon now leading a vigorous campaign to impress upon the U. S. public its full meaning. (Sr. High through College)

ATOMIC RADIATION (EBF)

12 minutes—sound—back and white $1.80 3

Unit Value

Explains fundamentals of atomic radiation: the dramatic story of its discovery, what it is and does, and why it should be respected rather than feared. Describes how it has been possible to reproduce in the laboratory some of the forms of radiation found in nature. Explains the roles of alpha, beta, gamma, and neutron particles in radioisotope research. (High School Physical Science and Adult)

ATTITUDES AND HEALTH

10 minutes—sound $1.80 3

Mary Baker didn't make the basketball team. Alice was actually ill because she failed to get an expected promotion. The situation seemed hopeless until they learned that wrong attitudes prevent the individual from doing his best, and can even cause physical illness. How self-confidence and right attitudes are vital to good health is demonstrated here. (Jr. High through Adult)

AUSTRALIA (EBF)

10 minutes—sound $1.80 3

A comprehensive and authentic survey of the geographic, economic, and social factors characterizing Australia today. Contrasts urban and industrial concentration in East and Southeast with slower development in arid central and western areas. Describes Australia's principal exports and imports and reveals a modern and progressive society maintaining strong economic and social ties with the motherland, Great Britain. (Elementary, Junior and Senior High)

AUSTRALIA—Sheep Ranch Country (UWF)

20 minutes—sound $3.00 5

Demonstrates that pastoral industries (with sheep dominating) and wheat farming are well suited to semi-arid lands which are sparsely populated and isolated from markets. This principle is shown to apply to Australia, where economy is dependent upon foreign trade with sheep products, wheat and flour the most important exports. Because the country is so dependent upon trade many people live in a few large seaports. Some manufacturing is carried on, based on local raw materials and protected home markets. Presents the contrast between the mode of life of the industrial centers where the growing steel and textile industries are being developed. (Elementary through Adult)

AUTUMN ON THE FARM (EBF)

11 minutes—sound—color $3.60 6

In this charming color film, two farm children observe the changes that take place in plant and animal life during autumn. Joan and Jerry become interested in such fall activities as apple and corn harvesting, grape picking, nut gathering, the hibernation of animals, and the migration of wild ducks. (Primary through Jr. High)

AZTECS, THE (CORONET)

10 minutes—color—sound $3.60 6

Reconstructing some of the most significant characteristics of pre-Aztec and Aztec civilization, the film explores notable ruins, carvings, and murals which depict this culture. Religion is found to have played an important role in the lives of the Aztec people, and

Unit Value

the re-enactment at Teotihuacan of a religious ceremony, as it might have been performed in 1500, contributes further to an understanding of the Aztec civilization. (Intermediate, Junior High, Senior High, College)

BABY ANIMALS (YA)

10 minutes—sound $1.80 3

A film dealing with animals and their young. Introduces and explains such concepts as degree and nature of parental care, resemblance to parents, general growth pattern, variation in ability to care for selves, and the fact some baby animals are hatched from eggs and others born from the body of the mother. (Primary and Elementary)

BABY SITTER (YA)

15 minutes—sound $1.80 3

Discusses the mutual problems and responsibilities of the baby sitter and the parent who employs her, as well as the important skills and knowledge which the sitter should have. The film's story is built around the experiences of Mary Gibson, a teen-age girl, on her first visit to the Brown's home where she spends the evening with Baby (age one) and Sue (age four). Presents most of the important problems which any sitter, boy or girl or adult, would encounter in such a situation. (Jr. High through Adult)

BABY'S DAY AT TWELVE WEEKS (EBF)

10 minutes—sound $1.80 3

The infant is followed through his domestic day from the time of his waking at six o'clock in the morning until the final breast feeding at ten o'clock at night. His dressing, bathing, feeding, daytime naps, play, and general care are presented. An interpretation of the significance of his various reactions is offered. (Sr. High through Adult)

BACKFIRE (PrincetonFlmCtr)

15 minutes—sound $2.40 4

An economics teacher poses the question to his pupils and neighbors: Should men receive rewards in proportion to their investment in enterprise or was Karl Marx right in his theory or "from each according to his ability, to each according to his need?" The teacher llustrates the democratic way with an effective classroom demonstration. (Jr. High through Adult)

BETTER BASKETBALL (OSFS)

30 minutes—sound ..... per day $2.00

Demonstrates original rules and current rules—portrays good officiating procedure—continuing motion—time limits—responsibility during screens and dribbles—basket interference, etc.

BACKWARD CIVILIZATION (EBF)

21 minutes—sound $3.00 5

A survey of life among the Berber tribe in Northern Africa, an excellent example of the stagnation which accompanies isolation of peoples. Every significant aspect of the daily life of these peoples is shown, drawing effective contrast between the phenomena of an environment of scarcity through isolation and our modern en-

Unit Value

vironment of plenty through communication and interdependence. (Jr. High through College)

BACTERIA—FRIEND AND FOE (EBF)

11 minutes—sound—color $3.60 6

Bacteria are growing plants, but they are not green like the plants we ordinarily see. Some are responsible for helping produce flavor in foods, while others may spoil foods. Some help disintegrate dead plants and animals, others produce chemicals called antibiotics that help fight disease. Some bacteria are beneficial to man, some are harmful, and still others are harmless. Without bacteria, life as we know it would be impossible. (High School and Adult) (Bacteriology and Health and Hygiene)

BADMINTON FUNDAMENTALS (CORONET)

10 minutes—sound $1.80 3

Fundamental skills and rules of badminton are demonstrated in this film by both expert and novice players. Slow-motion sequences and animation are used to make more clear the techniques of this popular game. Scenes of fast, expert professional play provide motivation for further study. (Jr. High through Adult)

BALLAD OF THE WEST (EBF)

16 minutes—sound—black and white $2.40 4

Based on a series of western folk tunes and cowboy songs, this film tells the story of a cowboy's longing to have his own herd and brand and to be his own boss. Photographed against the background of Arizona's Wickenburg and Hot Springs, the story revolves around the popular ballad The Chisholm Trail. (All ages) (General Interest)

BALL HANDLING IN BASKETBALL (EBF)

10 minutes—sound $1.80 3

Wilbur Johns, Basketball Coach, U. C. L. A., shows the fundamentals of ball handling, stance, grip, "feel" of the ball, fingertip control, adjustment before shooting, catching the ball and how to meet passes. Presents game shots to illustrate all points, uses slow and stop motion as well as animation to illustrate point up action. (Jr. High through Adult)

BALL HANDLING IN FOOTBALL

10 minutes—sound $1.80 3

Andrew Kerr, Football Coach, Colgate University, teaches fundamentals of ball handling; stance, grip, "feel" of the ball, fingertip control, adjustment before throwing or kicking, receiving passes from the center or from your own back, catching passes and punts, ways of carrying the ball and changing from one hand to another. Presents game shots, slow motion and stop motion techniques, and optical treatment with superimposed animation to illustrate principles. (Jr. High through Adult)

BANDAGES AND BULLETS (J&J)

20 minutes—sound—color $1.20 2

Treats the development of sterile bandaging, from the aseptic theories advanced by Drs. Pasteur and Lister. Shows Dr. Lister's early difficulties in advancing his theory of asepsis; and how it has

Unit Value

helped to become a reality by the mass production of sterile bandages in the United States. (Jr. High through Adult)

BANNISTER WINS THE MILE RUN (YA)

27½ minutes—sound $3.00 5

The occasion is the Fifth British and Empire Commonwealth Games and the main event the "Dream Mile" race between Dr. Roger Bannister of England and John Landy of Australia, both of whom had previously broken the four-minute barrier. We learn that both men will give up track, Bannister to begin internship, Landy to teach science. Then the "Dream Mile" gets underway and Bannister wins in 3:58.8. (Junior High through Adult)

BASE AND PLACE (Ind. U.)

27 minutes—sound $4.80 8

Presents the characteristics, history, and applications of the binary system. Through this system, emphasizes the basic principles of base and place in our system of numeration. Shows how numbers are represented in the binary system and its relationship to electronic digital computers. Demonstrates the importance of base and place in our number system. (College and Adult)

BASEBALL-BY-THE-CODE (OSFS)

25 minutes—sound $2.00

This film illustrates and explains the importance of playing by the rules of the game. High School, college, and professional players demonstrate the various play situations. Explanations of some of the more technical rules are included. (Junior High to Adult)

BASEBALL ROOKIE (MOT)

25 minutes—sound $1.20 2

Follows rookie outfielder Jim Lemon through the 1953 Spring training camp of the Cleveland Indians. The film depicts the various drills, batting and fielding practices, ending in an intrasquad game showing the various stars of the Indian roster.

BASEBALL TODAY (OSFS)

25 minutes—sound ..... per day $2.00

Play situations demonstrating proper pitching procedure, rights and limitations of the catcher, basemen, fielders, batter, runner and coaches. Correct rulings on balk, interference by catcher, batter, runner, fielder and infield flies. (Jr. High through Adult)

BASIC COURT PROCEDURES (CORONET)

15 minutes—sound $1.80 3

Two high school students learn from a practicing lawyer the function of the courts and how our law operates. In the development of a "criminal case," many specialized legal terms are clearly defined and the audience sees the roles played by the various courtroom figures. The film teaches not only the function of the courts, but the place of the judicial system in a democracy. (Jr. High through Adult)

BASIC FIBERS IN CLOTH (CORONET)

10 minutes—sound $1.80 3

Through this film students can actually compare fibers and fila-

Unit Value

ments under the movie microscope . . . for strength, length, absorptive power, elasticity, heat conductivity, cleanliness and washability. As we point out the relationship between these characteristics and each home use of cloth, every student judges basic cloth fibers. More intelligent buying of cloths will result from study of this film. (Jr. High through Adult)

BASKETBALL FOR GIRLS—GAME PLAY (CORONET)

10 minutes—sound $1.80 3
The finer points of this exciting and popular sport are demonstrated here. Individual player techniques in offense and defense are shown . . . pivoting, feinting, passing, screening, shooting, handling rebounds. This excellent film will heighten the interest and increase the skill of your students . . . will help make your physical education program a greater success. (Jr. High through Adult)

BASKETBALL TODAY (OSFS)

30 minutes—sound ..... per day $2.00
Demonstrations by skilled high school, university and Olympic champions. Plays analyzed in slow motion—interpretation on center jump action—free throw positions and violations. Throw-in after goal—substitution—ball out of bounds—personal fouls on player with and without the ball—rights and limitations during dribble, pivot and feint. (Jr. High through Adult)

BATHING TIME FOR BABY (J&J)

12 minutes—sound—color $1.20 2
An animated film, produced by Walt Disney Studios, showing step-by-step procedure for the table-tub bath for the infant. (Jr. High through Adult)

BATTING (CORONET)

10 minutes—sound—b&w $1.80 3
10 minutes—sound—color $3.60 6
This film covers, in slow motion shots, the important techniques of baseball-batting from the selection of the bat, stance, grip, and follow-through strike. (Jr. High through Adult)

BEACH AND SEA ANIMALS (EBF)

10 minutes—sound $1.80 3
A survey of typical beach and sea animals, their habitats and activities, shown in their respective environment by underwater closeups. Special consideration is given to their methods of self-protection and inter-relationships. (Elementary through College)

BEAR AND ITS RELATIVES (CORONET)

16 minutes—sound $2.40 4
Clear and interesting shots of the raccoon, the panda, kodiak bear, polar bear, the grizzly and the American black bear. Close-ups are given of teeth, hoofs, and ways of eating. (Primary and Elementary)

BEAVER (EBF)

10 minutes—sound—color $3.60 6
Highlights activities of the beaver in its natural environment. Illustrates ways in which the beaver's teeth, feet, and tail help him in swimming, eating, felling trees, and repairing a broken

Unit Value

dam. Reveals the unique construction of a beaver house, and stresses the importance of the animals as an agent of conservation and as a valuable fur bearer. (Elementary and Jr. High)

BEETLES (EBF)

10 minutes—sound $1.80 3

Studies of the egg, larva, pupa, and adult stages of the Tiger, Japanese and Ladybird beetles in their various habitats. Spread of the Japanese beetle is traced together with experimental methods for its control. (Jr. High through College)

BEGINNING RESPONSIBILITY—Taking Care of Things (CORNOET)

10 minutes—sound $1.80 3

As a persuasive means of interesting children in the importance of taking care of their belongings, this film answers a need long expressed by parents and teachers. It explains how and why children should care for things at school and at home. Importance is placed on having definite places to keep things, of putting articles back where they belong, of cleaning up after play time and storing and handling things properly to prevent accidents or damage. In using this film, many basic needs and desires of the child are answered . . . making it of double value as instructional material. (Primary)

BEGINNING SWIMMING (CORONET)

10 minutes—sound $1.80 3

Through scenes photographed both above and beneath the surface of the water, basic techniques of swimming for beginners are demonstrated. Land and water drills involving kicking, breathing, floating and paddling. (Intermediate through Senior High)

BEGINNINGS OF HISTORY (IFB)

42 minutes—sound $4.80 8

The pre-history of Great Britain, from the ice age to the coming of the Romans. Shows how the area was originally part of the mainland, but after the ice retreated, it became an island. The paleolithic and neolithic cultures, with tools of stone and bone, were followed by the bronze age. Successive waves of invaders and settlers swept over the island, culminating in the Celts. A reconstructed Celtic farm shows how the people lived at the time of the Roman invasion. (Jr. High through College)

BEGINNING TO DATE

12 minutes—sound—black and white $1.80 3

Dramatizes one of the most important periods in the lives of young teen-agers, with effective illustrations of right and wrong approaches to dating. Offers special help to the timid student, whose shyness creates a barrier to dating—and demonstrates basic rules for conduct on a date. Points out that these rules are based on consideration for others. (Jr. High) (Personal Guidance)

BEHAVIOR DAY AT FORTY-EIGHT WEEKS (EBF)

10 minutes—sound $1.80 3

Wholesome methods of child care are portrayed in numerous situations, including the administration of cod liver oil and orange

Unit Value

juice, the bath, dressing, feeding, elimination, floor play and daytime naps and sleep. Emphasis is placed upon the psychological implications and the educational significance of the infant's everyday experiences. (Jr. High through Adult)

BEHAVIOR PATTERNS AT ONE YEAR (EBF)

10 minutes—sound $1.80 3

Portrays the behavior patterns of a normal infant fifty-two weeks of age. The baby's manipulation and other reactions to one, two, three and ten cubes are interpreted and discussed by the narrator. Continues with the study of other test situations involving a cup and spoon, cup and cubes, pellet, pellet and bottle, ball, ring and string, paper and crayon, a performance box and a form board. (Sr. High through Adult)

BEHIND THE SHADOWS (TB)

10 minutes—sound $1.20 2

A doctor explains to a group of high school boys and girls what tuberculosis is. X-rays and animated diagrams illustrate his story (Jr. High through Adult)

BEHIND THE WHEEL (GM)

30 minutes—sound $1.20 2

Explains the many rules and regulations which must be observed and understood before expert driving ability can be achieved. (Jr. High through Adult)

BELGIUM AND THE NETHERLANDS: LANDS AND PEOPLES (CORONET)

10 minutes—color—sound $3.60 6

In presenting an overview of the Netherlands and Belgium, their relationship to one another and their neighbors, and the major ways in which their economy is related to environment, the film shows how easy access to the North Sea and many waterways help to make Belgium and the Netherlands "the trading workshops of Europe." Other significant characteristics of these countries—low lands, small size, dense population, and large coal resources—are shown in relation to the activities of the people.

BELO HORIZONTE (OIAA)

18 minutes—sound $1.20 2

The story of Brazil's "planned city with a plan." Belo Horizonte, a city of over 200,000 inhabitants, is unique in that less than 50 years ago, before a single house or street was built, complete plans for its building were drawn up. Now it is one of the most progressive and modern cities in the world and is located in a section rich in mineral resources. (Elementary through Adult)

BENEATH OUR FEET (TFC) **(See regulations—last page)**

9 minutes—sound $1.80 3

Glimpses of the insect world which exists in the grass show an ant drinking a dew drop, rival male crickets fighting, a cricket singing by moving its legs, a sand cricket struggling with a trapdoor spider, and aphids being eaten by ladybird larvae. (Jr. High through College)

Unit Value

BENEFITS OF LOOKING AHEAD (CORONET)

10 minutes—sound $1.80 3

A sound understanding of the importance of thinking seriously about the future and doing something about it is developed by this production. By encouraging students to look ahead to the kind of life they will want, the film helps them to think constructively about immediate problems and work toward achieving that life. It explains that planning needs a long-range view divided into shorter range objectives. Even though plans may change, they are still important and necessary to reaching tomorrow's goals. Church groups as well as school guidance classes will find a great amount of valuable material in this film. (Jr. High through Adult)

BETTER BULLETIN BOARDS (UnivInd)

11 minutes—sound—black and white $1.80 3

This film makes bulletin boards sound challenging and inspiring while it advances some practical ideas that any classroom teacher can apply. The many suggestions for subject material and display techniques make an unnoticed bulletin board unnecessary. Teachers in all grades will find this a helpful tool and will certainly welcome its many suggestions.

BETTER FOOTBALL

30 minutes—sound—black and white ..... $2.00 day

Play situations illustrating football rules. Scenes are frozen, suspending action permitting audience to follow official's decision. Suitable for coaches and officials, school assemblies, football study groups, service clubs and athletic banquets. (Jr. High through Adult)

BETTER READING (EBF)

13 minutes—sound—black and white $1.80 3

Reveals the problems confronting the slow reader and suggests ways in which these problems can be met and solved. Tells the story of an intelligent high school boy whose work suffers from his slow reading habits. Portrays the methods used by a reading clinic in helping him to increase his reading speed and understanding, and to enlarge his vocabulary. (High School) (Remedial Reading Classes—Teacher Training)

BETTER TOMORROW (UWF)

24 minutes—sound $1.20 2

Focuses upon the importance of education in a democracy and shows the activities of children and youth in the New York City Public Schools, emphasizing the facilities and opportunities open to everyone. Education is the key to "a better tomorrow." (Jr. High through Adult)

BETTER USE OF LEISURE TIME (CORONET)

10 minutes—sound $1.80 3

There are many leisure-time activities both interesting and educational that are open to young people. This film serves as a helpful guide in developing a constructive attitude about leisure time. It shows how time can be used constructively through a self-planned program of leisure time activities. (Jr. and Sr. High)

Unit Value

BEYOND URANIUM (Ind. U.)

29 minutes—sound $4.80 8

Dr. Seaborg and his associates outline the discovery of the first six elements beyond uranium. Dr. Edwin M. McMillan describes his of Neptunieum, the first trans-uranium element. Outlines the changes needed in the Periodic Table to accommodate new elements. Shows the miniature chemical equipment and techniques used to work with the amounts of plutonium which resulted in its separation. Dr. Bernard C. Harvey demonstrates a chain reaction and explains the operation of an atomic power plant.

BIG NUMBERS (Ind. U.)

27 minutes—sound $4.80 8

Demonstrates how scientists and mathematicians write and use very large and very small numbers. Stresses the meaning and importance of exponents and powers and shows some of their uses. Presents and demonstrates exponents and scientific notation as an easy way of writing and computing with large numbers. Explains negative exponents and demonstrates how very small numbers are written and used.

BIG TRAINS ROLLING (ASSN AM RR)

20 minutes—sound—color $1.20 2

A history of the railroad in the United States: its growth with the nation and its contributions to freight and passenger transportation, with emphasis on the modern era. (Jr. High through Adult)

BILLY AND NANNY

10 minutes—sound $1.80 3

Two kids are followed from birth until they are about two months old in play and in mischief. The interesting life of goats and kids; care and feeding, and milking are explained. Old Billy goat has been taught to pull a wagon, and Johnny drives Billy to deliver milk in the village. (Primary through Jr. High)

BILL OF RIGHTS OF THE UNITED STATES, THE (EBF)

16 minutes—sound $3.00 5

The first ten amendments to the Constitution are the specific guarantees which history, contemporary events, and the temper of men's minds had marked as vital safeguards of personal freedom. (Junior and Senior High)

BIRDS ARE INTERESTING (EBF)

10 minutes—sound—color $3.60 6

Colorfully presents some of the basic biological concepts concerning birds. Provides a systematic analysis of birds by classifying them under three categories—swimming and wading bird of prey, and perching bird. Contrasts such features as bills, feet, and wings to characterize each type. Birds depicted, in dramatic color photography, include hawks, owls, ducks, pelicans, canaries, and domestic chickens. (Elementary)

BIRDS IN WINTER (CORONET)

10 minutes—sound $1.80 3

Winter days are fine ones for students to get acquainted with such

Unit Value

birds as the chicadee, nuthatch, woodpecker, junco, cardinal, English sparrow, starling and even the robin. This film shows how to use a feeding station to attract these birds and how to recognize them when they appear. Pupils will see the seasonal aspect of bird life, the interdependence of living things and the food-getting adaptations of birds in winter. (Primary through Adult)

BIRDS OF PREY (EBF)

11 minutes—sound $1.80 3

Several common species belonging to the group of birds of prey are presented in this film. Among them are the turkey vulture, black vulture, marsh hawk, red-tailed hawk, rough-legged hawk, bald eagle, sparrow hawk, and the owl family. These birds are shown in their natural habitats, and pursuing their characteristic activities. Typical calls and sounds are presented as the occasion demands. (Elementary through College)

BIRDS OF OUR STORYBOOKS (CORONET)

10 minutes—color—sound $3.60 6

The robin, cardinal, crow, owl, bluejay, sparrow, redheaded woodpecker, wren, and seagull—birds which children encounter most frequently in their stories and texts—are shown both as they appear in book illustrations and as they are in their natural settings. Characteristics of the birds—their coloring, calls, and easily observed habits—are carefully integrated with poems and stories at the primary level. (Primary)

BIRDS OF THE COUNTRYSIDE (CORONET)

10 minutes—color—scund $3.60 6

The indigo bunting, eastern kingbird, marsh hawk, sparrow hawk, night hawk, mourning dove, meadowlark and killdeer are seen in their nesting places. The markings and plumage of the birds, what they eat, and how they care for their young are observed. The film emphasizes the value of these birds to man. Entirely new scenes and sound. All bird calls are authentic. (Intermediate, Junior High)

BIRDS OF THE DOORYARD (CORONET)

10 minutes—color—sound $3.60 6

Right in our own backyard we find these birds, but it takes the telescopic lens of the color camera to discover the details of their private lives. Here we see them in their favorite nesting places and learn to recognize each one. Cast of characters includes the white-throated sparrow, robin, bronzed grackle, house wren, yellow warbler, and purple martin. (Primary, Intermediate, Junior High)

BIRDS OF THE WOODLANDS (CORONET)

10 minutes—sound—color $3.00 5

Some of the most fascinating birds are those of the woodlands. Here is the flicker, living in his home drilled in the trunk of a tree; the redstart cobwebbing her nest—the purple finch perching his penthouse in a forty foot pine while the overbird conservatively builds on the ground. The film shows, too, the black-billed cuckoo, long-tailed, appealing awkward bird of questionable reputation. (Primary through Adult)

Unit Value

BIRTH OF THE SOIL (Living Earth Series) (EBF)

10 minutes—sound—color $3.60 6

Reveals how man's very survival depends upon a few inches of topsoil which only nature can manufacture—over a period of many centuries. Explains, with scientific accuracy, the remarkable process by which life-giving topsoil is produced from the basic raw materials of rock, water, air, and sunlight. Contrasts the productive capacity of topsoil with that of subsoil. (Jr. and Sr. High)

BLACK BEAR TWINS (EBF)

11 minutes—sound $1.80 3

This film portrays the experiences of a family of campers in observing a pair of small, hungry, and mischievous twin bears. The bears play with a blanket and ball; raid a wild-bee hive; nurse their stings in a mud puddle; then go for a swim in an adjoining lake. (Elementary through Jr. High)

BLACK MARKETING (OWI)

11 minutes—sound $1.20 2

Dramatizes an object lesson which pleads for public cooperation with the OPA and local law-enforcement officials to prevent violation of ceiling prices and rationing laws in black marketing. (Jr. High through Adult)

BLOCK THAT TERMITE (USDA)

20 minutes—sound $1.20 2

This film gives the complete story of the termite, showing how it plays havoc with buildings and methods of prevention. (Jr. High through Adult)

BLOCKING IN FOOTBALL (EBF)

10 minutes—sound $1.80 3

Andrew Kerr, Football Coach, Colgate University, teaches fundamentals of good blocking; position, speed, drive and follow-through, timing, and body control. Describes the two basic kinds—shoulder and body blocks—and demonstrates half a dozen variations of these. Emphasizes the importance of practice, experience, and good physical condition, using game shots, slow motion, stop motion, and animation techniques. (Jr. High through Adult)

BOATS (EBF)

11 minutes—sound $1.80 3

On taking a boat trip from Albany, down the Hudson River to New York, Nancy and Roger have many exciting adventures. Between seeing the sights along the shore, inspecting the different parts of their boat, and observing the different types of boats which ply the river, their time is fully occupied. A landing at a river town, the approach to New York City and the many wonders of its harbor are climaxed by seeing a great ocean liner, assisted from its dock by tugboats to begin its journey across the Atlantic. (Primary through Jr. High)

BOB MARSHALL COMES HOME (USDA)

17 minutes—sound $1.20 2

Through the story of a returning veteran who wants to expand his farming production through modern methods, the story of the

Unit Value

development and growth of REA cooperatives is told. (College and Adult)

BODY DEFENSE AGAINST DISEASE (EBF)

10 minutes—sound $1.80 **3**

Provides an exposition of the three lines of defense against disease: the skin, phagocyte cells and lymphatics, and the circulatory system, including the liver and the spleen. Closeups reveal the ciliary action of the mucous membrane. Normal, infected and ruptured appendices are depicted. Magnified views show the reaction of serums containing antibodies of typhoid and cholera bacteria. (Jr. High through College)

BOOKKEEPING AND YOU (CORONET)

10 minutes—sound $1.80 **3**

A high school bookkeeping class demonstrates why students study bookkeeping, life of bookkeeping in single proprietorship, keeping permanent records, business papers such as invoices, checks, statements, record keeping for social organizations, and family records, bookkeeping in business, home, government and community life. (Jr. High through Adult)

BOONE, DANIEL (EBF)

20 minutes—sound $2.40 **4**

Relives important episodes in the life of America's best-known wilderness scout, Daniel Boone, revealing the personality traits and experiences which made him outstanding in his field. Portrays Boone's youth in Pennsylvania and North Carolina, where he learned the ways of the wilderness. Traces his activity in the French and Indian Wars, his pioneering adventures in exploring and settling Kentucky, his activity in the Revolutionary War and his final settlement in Missouri, where his reputation as a pioneer and scout became firmly established. (Jr. High through Adult)

BORN IN THE WHITE HOUSE (National Foundation Infantile Paralysis)

26 minutes—sound—black and white $1.20 **2**

Traces the progress of medical science in the conquest of disease, with particular emphasis on recent gains in polio research and treatment. (All Ages)

BOSS COMES TO DINNER (ASTOR)

10 minutes—sound $1.20 **2**

A young couple demonstrates how to entertain "the Boss" and his wife. Based on Emily Post. (Adult)

BOSTON MASSACRE, THE (YA)

27½ minutes—sound $3.00 **5**

Walter Cronkite reports, as if on March 5, 1770, the rioting and increasing protest demonstrations in Boston against British taxes levied without representation. Outside the Customs House a mob attacks a British sentry. Goaded beyond endurance, the Captain orders his men to fire on the rioters. John Adams defended Captain Preston in his trial for murder and the Captain was acquitted. (Jr. High through Adult)

BOSTON TEA PARTY, THE (YA)

27 minutes—sound $3.00 **5**

Unit Value

December 16, 1773, the eventful day when American patriots decide to strike a daring blow against British tyranny and taxation. Portrays the spirit and personalities of the times which led up to the Revolution. (Junior High through Adult)

BOUNTEOUS EARTH (OIAA)

9 minutes—sound $1.20 2

Deals with agricultural celebration in Mexico. Farmers bring their animals to Church to be blessed; the spring fertility rites at Tlacotalpan; the harvest festival at Tehuantepec. A thankful people show their gratitude for a bountiful harvest. (Jr. High through Adult)

BOY OF MEXICO, A: JUAN AND HIS DONKEY (CORONET)

10 minutes—color—sound $3.60 6

Through the warm and human story of Juan, a small Mexican boy, and his donkey, Pepito, children become acquainted with some of the characteristics of rural Mexico. In following Juan's experiences on a single day, the film conveys a sympathetic feeling for Mexico and provides a rich background for reading and language arts activities related to life in this country. (Primary, Intermediate)

BRASS CHOIR (EBF)

10 minutes—sound $1.80 3

The timbers of various brass instruments are demonstrated—the brilliance of the trumpets, the mellow romantic quality of the horns, the rich power of the trombones and the massive depths of the tuba. Unique camera angles show intimate details of playing techniques. Opens with a portion of Beethoven's "Fifth Symphony" and closes with the finale from Wagner's "Tannhauser" Overture. (Elementary through Adult)

BRAZIL (EBF)

11 minutes—sound $1.80 3

Provides a geographical orientation to Brazil's vast extent, its regional contrasts, and its coast cities, before concentration on the coffee-growing area. A land owner, an agent, and a family of pickers are seen in their relationships to a large coffee plantation, with its varied crops, its mixture of immigrant peoples, its educational and religious activities. Brazil is revealed as a predominantly Portuguese country. (Elementary through College)

BRAZIL—Tropical Lowland (UWF)

20 minutes—sound $3.00 5

In this film, we study life in a large, hot humid lowland dominated by forests; although this area is rich in tropical products, it is sparsely populated. We see native families in their river front jungle homes, engaging in primitive subsistence farming, and gathering forest products, such as wood and nuts. The only connection with the outside world is the Amazon River, down which the natives make trips to small trading posts where river steamers collect their jungle products for transport to the port of Manaos, from whence they are shipped to all parts of the world. (Elementary through Adult)

Unit Value

BRAZIL GETS THE NEWS (OIAA)

10 minutes—sound $1.20 2

Living proof that South America is modern and enterprising. Taken in a Sao Paulo newspaper plant, the film describes the complete publication of a newspaper from the original dispatch to the time when the paper is on the streets. (Jr. High through Adult)

BRAZIL'S FISHING SCHOOL (OIAA)

18 minutes—sound $1.20 2

The story of the favorite project of President Vargas, the Marambia Fishing School, located fifty miles south of Rio de Janeiro and facing on the bay of Ilha Grande. This unique project trains Brazilian boys in all the arts of fishing, handling and building small boats, making and repairing nets, and catching all sorts of fish from sardines to sharks. (Elementary through Adult)

BRAZILIAN QUARTZ (OIAA)

10 minutes—color—sound $3.60 6

An interesting pictorial report of the mining of quartz in Brazil and the part that this great Brazilian resource is playing in winning the war. (Elementary through Adult)

BREAD (EBF)

11 minutes—sound $1.80 3

Gives the story of bread from the wheat farm to the table. Sequences portray the use of flour in the home; the harvesting of wheat; flour milling; and the making of bread in a modern bakery. (Primary through Jr. High)

BRIDGE, THE (OIAA)

32 minutes—sound $1.20 2

The emphasis of this documentary film is on the transportation problem in South America. Shows how air travel will probably play a bigger part than anything else in modernizing the remote, inaccessible regions of Latin America. (Elementary through Adult)

BRITAIN AND HER EMPIRE (MOT)

17 minutes—sound $1.80 3

Here is a pictorial exposition of the relationship of England to her two score colonies, protectorates, and mandates—and the outstanding characteristics of the free and self-governing dominions. In an analysis of the British people, her current problems in housing, health and social security are covered. (Jr. High through Adult)

BROADER CONCEPTS OF CURRICULUM (McGRAW-HILL)

21 minutes—sound $2.40 4

Based on the doctrine, "Secondary education for all the children of all the people," this film shows that a modern curriculum is the outgrowth of many evolving social and economic pressures in our changing way of life. Among the needs of youth are—civic competence, vocational orientation, preparation for family living, health and physical fitness. This film portrays a wide variety of learning experiences which the school can provide for our fast-expanding secondary school population. (College-Adult)

Unit Value

BROADER CONCEPT OF METHOD, Part I (McGRAW-HILL)

13 minutes—sound $2.40 4

Presents a frank picture of the conventional teacher-dominated lesson hearing type of recitation and shows typical effects of this method upon student attitudes, responses and learning. The film then shows alternative techniques to achieve broader educational objectives. A comparison is drawn between the formal recitation and the informal, group discussion types of class sessions in which students are permitted, under unobtrusive teacher guidance to share in the planning of their work and are thereby stimulated towards worthwhile and meaningful learning experiences. (College and Adult)

BROADER CONCEPT OF METHOD, Part II (McGRAW-HILL)

19 minutes—sound $2.40 4

Students are shown learning to work together, to organize themselves into functional groups, to make and carry out plans for investigation, and to present their findings and recommendations in a group report. In these activities some difficulties are encountered which the teacher helps them overcome by tact and guidance. (College and Adult)

BRONCO BUSTERS (National Film Board of Canada)

10 minutes—sound—color $1.20 2

Over the rolling hills of Alberta, the colts and wild horses run free as the wind—until round-up time, and the Calgary stampede. With a background of western music and song, the film shows the grace and speed of the unbroken herds of the foothills, the dust and clamour of the corral, and the event that's bigger than Christmas for today's rancher and cowboy—the Stampede at Calgary. There with the bleachers crammed and a thrill—and spill—a minute, we see all the excitement of roping, bronco-busting, and bulldogging a steer, with the chuck wagon race as a rousing climax. (All Ages)

BROTHERHOOD OF MAN (BRANDON)

10 minutes—sound—color $3.60 6

In gay colors with brilliant new animation, writing and music technique it tells the important story all men and women of good will have dreamed of putting into popular and intelligent form. All age levels will understand this timely film. (Elementary through Adult)

BRUSH TECHNIQUES (EBF)

10 minutes—sound—color $3.60 6

A color film photographed as if through the eyes of the artist, Eliot O'Hara, one of the most successful teachers of the use of the watercolor medium. All important steps in direct watercolor painting are portrayed to demonstrate the selection and arrangement of masses drawn from a scene in nature to effect a pleasing composition. (Jr. High through Adult)

BUENOS AIRES AND MONTEVIDEO (OIAA)

10 minutes—sound $1.20 2

A study of Buenos Aires with its large buildings, its modern apartments, its department stores, and its modern way of life. From there the cameras move to Montevideo, the capital of

Unit Value

Uruguay, with its beautiful homes and wide, white beaches. (Elementary through Adult)

BUILD YOUR VOCABULARY (CORONET)

10 minutes—sound $1.80 3

Mr. Smith, unable to express himself effectively, takes steps to improve his vocabulary. He starts a vocabulary notebook, fixes new words in mind by immediate use, makes a conscious effort to determine meanings through context and to be alert for words with the right meaning. He uses his newly acquired vocabulary with success. (Junior High through Adult)

BUILDERS, THE (EBF)

20 minutes—sound $1.80 3

The construction of a skyscraper, showing the work of draftsmen, wreckers, excavators, steel workers, and the laying of concrete floors, bricklaying and marble work. Plumbers at their job, terra cotta and tile setters, plasterers, roofers, painters and the men who install elevators are also shown. (Jr. and Sr. High)

BUILDING A HIGHWAY (EBF)

10 minutes—sound $1.80 3

Skillfully demonstrates major steps in the construction of a modern, two-lane highway. Illustrates such processes as clearing, cutting, scraping, and leveling the roadbed; assembling materials; mixing and dumping the concrete; and smoothing and finishing the surface. Finally reveals the completed highway open to traffic. Emphasizes the necessary skills involved in providing well-built, safe highways for automotive traffic. (Primary and Elementary)

BUILDING A TANK (OWI)

20 minutes—sound $1.20 2

The speed-up of the tank production program, including technical details regarding construction and processes involved in the manufacture of the M-3 medium tank. (Jr. High through Adult)

BUILDING AMERICA'S HOUSES (EBF)

11 minutes—sound $1.80 3

Animated drawings and live-action photography are used to analyze important reasons for high building costs, and to examine ways in which these costs can be reduced. A final sequence shows how the economics of mass-production can be applied to housing costs by means of prefabrication, site fabrication and power tools. (Jr. High through Adult)

BUILDING AN OUTLINE (CORONET)

10 minutes—sound $1.80 3

Values of outlining and the basic principles involved in this important educational skill are presented in this motion picture. Students will learn how to find main headings, how to word or phrase an outline and what the mechanics of outlining are. Teachers of all subjects will find this film an effective aid in helping students plan and organize reports and papers. (Elementary through Sr. High)

Unit Value

BUILDING THE PANAMA CANAL (KB)

11 minutes—sound $1.80 3
Historic scenes of the actual building of the canal. Shows the uniting of the Pacific and Atlantic Oceans and how the locks operate. Concludes with a trip through the canal. (Elementary and Jr. High)

BULLY (YA)

10 minutes—sound $1.80 3
Deals with the problem of the individual who is too aggressive in his relations with others of his group. The situation dramatized concerns Chick, a young boy in his early teens, large for his age, and decidedly aggressive in his relationships with others. Chick is the leader of a small gang of boys, most of whom are smaller in size. The boys and girls involved are junior high school students. (Elementary and Jr. High)

BUS DRIVER, THE (EBF)

11 minutes—sound $1.80 3
A dramatized account of an eventful cross-country bus trip made by a small boy. Shows how a bus driver meets driving hazards, serves his passengers, and keeps his bus in operating condition. (Jr. High)

BUTTERFLIES (EBF)

10 minutes—sound $1.80 3
The complete life history of the cabbage butterfly and the swallowtail butterfly with their different characteristics and habits, including their role in nature, that of aiding in the cross-fertilization of flowers. Time-lapse photography is employed to show in a few seconds processes which require an hour or more. The destructiveness of the cabbage butterfly, as well as its unusual control by a natural enemy, is dramatically depicted. (Elementary through College)

BYWAYS OF FRANCE (TFC) **(See regulations—last page)**

9 minutes—sound $1.80 3
A crosscut of peasant life in Brittany and Normandy set in the peaceful tempo of the countryside is portrayed here. A superior film, unique in its inclusion of folk music and singing in the completeness of its portrayal of rural life, and in the excellence of its photography. (Elementary through Sr. High)

CALHOUN, JOHN (EBF)

20 minutes—sound $2.40 4
Highlights important episodes in the career of John C. Calhoun, honored statesman and ardent advocate of states' rights. Depicts events of his early political career, his part in the War of 1812, and the difficulties he encountered as vice-president. Dramatizes developments which compelled him to change from a nationalist to a leader of Southern sectionalism. (Jr. High through Adult)

CALIFORNIA AND ITS NATURAL RESOURCES (BM)

40 minutes—sound—color $1.20 2
Presents the resources, products and industries of the state, contrasting the present development with the barrenness and waste-

Unit Value

land of California's early history. Shows the transformation of desert wastes into productive fields by means of irrigation, rugged mountains into mineral mining and milling activities, and cliff scarred coastlines into petroleum production facilities. (Jr. High through Adult)

CANADA—Home of the French Canadians (UWF)

20 minutes—sound $3.00 5

Where the climate makes it possible, low fertile land along rivers makes good farm land. When settled by people with common language, religion, and other ethnic ties, river lowlands tend to maintain their cultural homogeneity for long periods of time. In Papa Paradis and his family, who live in the village of St. Pierre, and are the central characters in the story, the picture demonstrates how these principles operate in French Canada. The lower St. Lawrence River is wide and navigable, with fertile land on both sides. Farm life reflects the influence of French culture. The cool, moist climate is good for dairying and nearby cities such as Quebec and Montreal help make this occupation profitable. (Elementary through Adult)

CANADA'S NEW FARMLANDS (UWF)

20 minutes—sound $3.00 5

The principles which govern the development of new frontiers are clearly set forth in this picture. We observe Roy and Einar Grimsrud, two young Norwegians, who fought in the Canadian Army, begin the development of their new lands. Clearing the land, planting the crops and taking part in the life of the new community, these young men are typical of the people who push the boundaries of our civilization ever outward to new frontiers. Contrasted to the life of the Grimsrud boys the film presents the more settled life in the growing town and on the farm of Mr. and Mrs. Watson, two of the earlier settlers. (Elementary through Adult)

CANADIAN CRUISE (NFB)

14 minutes—sound—color $1.20 2

Canada's waterways offer rewards and excitements unknown to the highway traveller. Bound from Rochester to Montreal on the Armstrong's 40-footer, we head across Lake Ontario for Kingston and the Rideau Canal System. Now there is need for a ready camera and a supple rod. At Rideau Ferry the Regatta is in full sail. In Ottawa, Canada's capital, we tie-up within sight of Parliament Hill. Maxvile lures us ashore for the excitement of the Scottish games. (Elementary through Adult)

CANALS OF ENGLAND (EBF)

20 minutes—sound $3.00 5

Origin, development, and present status of canal boat traffic in England. A voyage on one of the boats through Grand Union Canal. (Jr. and Sr. High)

CANCER (EBF)

12 minutes—sound $1.80 3

A timely and vital film explaining the basic facts that everyone should know about cancer, second only to heart disease as a cause of death in the United States. Describes the nature of cancer, the

Unit Value

widespread necessity for constant vigilance in the detection and subsequent treatment of cancer.

CANDLE MAKING (BARR)

10 minutes—sound $1.80 3

A pioneer family is seen making "tallow dip." Father starts the fire with his fire bow; Donald brings wood, water and tallows; Elaine helps her mother twist the candle wicks on the "candle rods" and helps with the dipping. Father trims the candles and Donald packs them in the candle box. With the work finished the family gathers around the evening fire and father reads by candlelight. (Elementary and Jr. High)

CANOE COUNTRY (NFB)

13 minutes—sound—color $1.20 **2**

A Cincinnati family vacation in Canada's northern country with an 18-foot canoe. Where the "Voyageurs" once followed the fur trade, these modern holiday-makers off the beaten track, share the healthy stimulus of the outdoors. They see a shy deer, a surprised bear breaks from a clearing, a great northern pike smashes the bait. (Elementary through Adult)

CANYON COUNTRY (FORD)

14 minutes—sound—color $1.20 2

Photographs of the scenic beauty of the Grand Canyon of the Colorado River, and the surrounding countryside. (Elementary through Adult)

CAPITALISM (CORONET)

10 minutes—sound $1.80 3

The camera introduces to your students some important aspects of the capitalistic system—private property, profit, competition, freedom of contract and free enterprise. Through the story of a high school radio forum, students will also have an opportunity to listen to the conflicting opinions of several people, each of whom tries to tell what our system means to them. (Sr. High through Adult)

CAPTAIN JOHN SMITH (EBF)

20 minutes—sound $2.40 4

Dramatizes the struggles of the first permanent English colony in the New World.

CARBON AND ITS COMPOUNDS (CORONET)

10 minutes—sound $1.80 3

A diamond . . . a pencil . . . and a chunk of charcoal. Beginning with these familiar objects, this film explains carbon's simple compounds and introduces hydrocarbon and the more complex chain and ring compounds. It teaches appreciation and understanding of the many forms and uses of carbon and its tremendous importance in our domestic and industrial worlds. (Sr. High through Adult)

CARBON FOURTEEN (EBF)

12 minutes—sound $1.80 3

Explains the use of radiocarbon (carbon 14) as a means of determining the age of ancient objects. Defines "half-life" in clear, lucid terms. Illustrates the role of carbon 14 in tracing the vital

Unit Value

processes of growth in living things. Shows how carbon 14 is permitting an approach to a solution of the riddle of photosynthesis, and how it has an important bearing on observational methods in life sciences. (High School and Adult) (Physical Science)

CARE OF ART MATERIALS (YA)

11 minutes—sound $1.80 3

An all-animation film made especially for young children, and designed to promote greater interest and care in the handling of art materials. Discusses care and use of such common tools as brushes, paints, chalks and crayons, scissors, paste and glue, and clay. (Primary)

CARE OF HAIR AND NAILS (EBF)

11 minutes—sound $1.80 3

A fairy tale character uses magic to help youngsters learn good habits. She shows them how to clean and manicure fingernails, how to trim toe-nails, and how to shampoo and brush the hair. She lets them see some common diseases of the hair. Animated drawings show the structure of hair and nails and explain why their care is important. (Primary and Elementary)

CARE OF PETS (EBF)

11 minutes—sound $1.80 3

Natural scenes of pets and instruction on how children can take care of them. (Primary through Jr. High)

CARE OF THE FEET (EBF)

10 minutes—sound $1.80 3

Explains clearly the functions of the feet and the distribution of the weight of the body with the relation of this weight to the force of gravity affecting the feet while the body is standing at rest or in motion. With the aid of diagrams and x-ray it shows vividly the results of foot abuse, gives remedies for correcting foot ailments, and explains the proper care of the feet. (Elementary through Adult)

CARE OF THE SKIN (EBF)

10 minutes—sound $1.80 3

Demonstrates the good habits of skin hygiene which every child should form. Portrays three attractive children as they prepare for bed, showing the proper way to wash hands and face, and to bathe. Common skin ailments are illustrated. Animated drawings describe the structure of the skin and explain why soap is necessary for cleanliness. (Primary and Elementary)

CAREER: MEDICAL TECHNOLOGIST (C-W)

24 minutes—sound—color $1.20 2

Story of four high school students and their planning for careers in medical technology. Shows the proper preparation in College and the kinds of work that a medical technologist does. Also points out the various fields in which one may work when the training period is finished. (Sr. High through College)

Unit Value

CARVER, GEORGE WASHINGTON (TFC)—(See regulations—last page)

10 minutes—sound $1.80 3
How a Negro slave boy received an education, became a scientist, and worked to the benefit of the Southern farmer. (Jr. High through College)

CATALYSIS (EBF)

10 minutes—sound $1.80 3
Explains concentration by absorption, activation by absorption, intermediate compounds in a homegenous mixture, chain reactions, breaking of reaction chains, poisoning of catalysts, and negative catalysts or inhibitors. (Jr. High through College)

CATCHING FUNDAMENTALS (CORONET)

10 minutes—sound $1.80 3
Since the position of catcher is the most difficult baseball position to master, attention should be given to developing fundamentals carefully. Here, the three basics of good catching are demonstrated: (1) Catching itself, including signals, stance and catching the pitch (2) Throwing to the pitcher and the baseman (3) Skill and strategy during game play. (Jr. High through Adult)

CATTLEMEN, THE (EBF)

10 minutes—sound $1.80 3
Depicts in full detail life on a cattle ranch and the activities of the family and its hired help. (Primary through Sr. High)

CAUSES AND IMMEDIATE EFFECTS OF THE FIRST WORLD WAR (INT. GO.)

23 minutes—sound $2.40 4
Animated maps, scenes from newsreels of the period, and commentary combine in this film to explain the major causes and the immediate effects of the 1914-18 First World War. A general outline of casual factors beginning with the year 1879 are cited. Then the course of the War is traced through the Armistice. After the Armistice animated maps show in detail the well-known terms the Treaty of Versailles. We see Congress reject the Treaty and the League of Nations and the minority problems in Europe after the Treaty was put into effect. (Jr. High through Adult)

CELL—STRUCTURAL UNIT OF LIFE (CORONET)

10 minutes—sound—color $3.60 6
Here, through amazing photomicrography, the living, simple cell is authentically presented. Students actually see the moving, living protoplasm in a leaf cell . . . see amoeba taking food, growing, dividing . . . become familiar with the functional differences in cell structure. This vivid film teaches the basic relationship of our own living bodies to other living organisms in the world. (Elementary through Adult)

CENTRAL AMERICA (EBF)

10 minutes—sound $1.80 3
Presents authentic documentary material concerning the geography and climate of Central America and the story of its peoples

Unit Value

and their present-day activities. Photographic sequences depict the types of people and economic activities of the region, including agriculture, manufacturing, commerce, and transportation. An important film for developing acquaintance with Latin America. (Elementary through Adult)

CHALLENGE TO DEMOCRACY (OWI)

17 minutes—sound $1.20 2

This film tells the story of 110,000 displaced people and how the U. S. Government is handling the problem. The subjects are people by Japanese descent who were evacuated from the Pacific coast by the Army in 1942 and subsequently transferred to barrack cities. (Sr. High through Adult)

CHAMBERLAIN AT MUNICH (YA)

27½ minutes—sound $3.00 5

On September 29, 1938, Chamberlain met with Hitler, Mussolini, and Daladier to discuss the Czechoslovakia Germans' demand for autonomy. The four leaders sign the Munich pact, indicating almost complete submission to the demands of Hitler. In London Duff Cooper resigns his post as first lord of the Admiralty. Hitler's promises proved false. Within the year Poland was invaded. But on this day in 1938 Chamberlain was a world hero—the torch-bearer of peace. (Junior High through Adult)

CHAMPIONSHIP TENNIS—1947 (AFS)

11 minutes—sound $1.80 3

United States Lawn Tennis Association championships at Forest Hills, Long Island, featuring Jack Kramer, Frank Parker, John Bromwich, Louise Brough, Margaret Osbourne and Dorothy Hart. Slow motion shows the techniques of each of these tennis stars. (Jr. High through Adult)

CHANCE TO LOSE (CC)

10 minutes—sound $1.20 2

Fully stocked gasoline tanks and production of new cars are luring motorists to the open road in prewar numbers. People are driving farther and faster. Many old cars are in poor mechanical condition. These facts obviously create a hazard that puts emphasis on safer, saner driving at the present time. This dramatic picture sells "safe driving" in a thrilling way. Valuable tips on safe driving are demonstrated. Approved by National Safety Councill. (Jr. High through Adult)

CHEATING (YA)

10 minutes—sound $1.80 3

Deals with the problems of the individual who unfairly seeks the help of others in the performance of his school assignments. The situation dramatized concerns John Taylor, a junior High School member of the student council, who gradually comes to place more and more dependence on Mary Mathews, his classmate, for assistance in completing his school assignments. The climax of the situation occurs when John is caught receiving help during an examination. (Elementary and Jr. High)

CHEMISTRY AND A CHANGING WORLD (EBF)

10 minutes—sound $1.80 3

Unit Value

Directs attention to the significant role which chemistry plays in our modern world. Traces the steps leading up to the production of electric furnace phosphorus. Portrayals of the work of research chemists and chemical engineers from the inception of the idea to the multiple uses of the completed product provide vocational information. (Jr. High through College)

CHICKEN LITTLE COUNT TO TEN (Ind. U.)

14 minutes $3.00 5

The Friendly Giant reads *Chicken Little Count to Ten* by Margaret Friskey, published by the Children's Press. After the story, Rusty the Rooster then drinks a bowl of milk to show how a chicken must jiggle to drink. (Primary)

CHILDREN OF CHINA (EBF)

11 minutes—sound $1.80 3

Reproduces episodes from the home, school and play life of children in a representative village deep in the interior of China. Different types of family relationships are observed. School training in loyalty to parents, together with home and community customs reflect the influence of Chinese tradition on contemporary life. Recreational activities are shown, and Chinese dialogue is reproduced and interpreted in several sequences. (Primary through Jr. High)

CHILDREN OF HOLLAND (EBF)

11 minutes—sound $1.80 3

Study of the home life, environment and activities of a country boy and girl in picturesque Holland. Their school activities, sports and games, and a horse and cart trip with their parents to a typical Dutch town provide glimpses of rural and urban life. Handicraft, hobby and recreational activities, are shown. (Primary through Jr. High)

CHILDREN OF JAPAN (EBF)

11 minutes—sound $1.80 3

In an environment obviously influenced by Western technology, the film presents events in the daily life of a middle-class Japanese family. Their home surroundings, living and sleeping quarters, furnishings, dress, customs, and manners are depicted, along with school and play experiences of the children and routine tasks of the parents. (Primary through Jr. High)

CHILDREN OF RUSSIA (IFF)

13 minutes—sound $1.80 3

You wouldn't expect to see a dramatization of our American Huck Finn in this film but it's there because it is included in the Russian school curriculum. In this film we see how the Russian children go to school—garden—play—parade—visit museums and the art galleries—and live in the summer Pioneer camps, comparable to our youth camping programs. (Primary through Sr. High)

CHILDREN OF SWITZERLAND (EBF)

10 minutes—sound $1.80 3

A railway train makes a long steep climb to a village in the Swiss Alps. On the village street we find Trudi Naegeli and her brother

Unit Value

Hans, who often linger in the village to see tourists arrive. On their way home they stop at the shop of a woodcarver. Here we see figures of William Tell and many, many carvings of cattle and clocks of every size. Father Naegeli makes his own cheese, and harvests his own crops. (Primary through Jr. High)

CHILDREN'S EMOTIONS (McGRAW-HILL)

16 minutes—sound $3.00 5

Discusses the major emotions of childhood: fear, anger, jealously, curiosity and joy. Each is explained at various age levels, and each is dealt with in an intelligent manner. (College and Adult)

CHILE (EBF)

11 minutes—sound $1.80 3

Calls attention to varied aspects of the Chilean scene—mountains, deserts, glaciers, mines, ports, and pastoral areas—before proceeding to an estate in the agricultural Central Valley. Here the role of the state is seen in relation to the visiting owner and his family the farming population, and Chilean agriculture generally. On the family's return to Santiago, varied aspects of Chile's capital city are featured—especially its role as an educational center. Spanish dialogue is extensively used throughout. (Elementary through Adult)

CHINA (MOT)

18 minutes—sound $1.80 3

This film shows China today faced with enormous problems in its attempts to make the transition from an ancient empire to a unified republic. Presents China's old way of life, little changed since medieval times; the beginnings of democracy and westernization under Dr. Sun Yat-sen; the long years of bitter struggle against Japanese agression and tyranny; and then, China today. (Jr. High through Adult)

CHINA: THE LAND AND THE PEOPLE (CORONET)

10 minutes—color—sound $3.60 6

Stressing the essential characteristics and differences between North and South China, this film presents an overview of the country whose population is greater than that of any other area in the world. Showing the close relationship which has, for centuries, exited between the people of this vast land and the land itself, the film accents the importance of agriculture to the Chinese and anticipates the future of China—a shift towards industrialization. (Intermediate, Junior High)

CHINA—Oriental City (UWF)

20 minutes—sound $3.00 5

We study the habits and customs of oriental urban life in this picture. Life of people living on sampans of this river port and life in a Cantonese merchant's home are vividly presented. We watch Chinese artisans making handicrafts from ivory and silver. Produce arriving in Canton by boat and cart show the dependence of the city upon the surrounding countryside. (Elementary through Adult)

CHINA—Szechwan Province (UWF)

20 minutes—sound $1.20 2

Unit Value

The Szechwan basin of South China is seen to be densely populated country, where farm land is scarce and an intensive subsistence type of agriculture is the characteristic means of livelihood. (Elementary through Adult)

CHINA CRISIS (OWI)

20 minutes—sound $1.20 2

This is the story of the Fourteenth Air Force, originally the Flying Tigers. Opening with background scenes of unchanging China, the film pictures the difficulties of transporting men and materials into China from India—over 700 miles of varied-gauge railways and over 500 miles of Hump flight. After making the Hump secure, airfields were built by Chinese hand-labor. The film closes with pictorial statistics on the accomplishments of the Flying Tigers. (Jr. High through Adult)

CHIPMUNK AND HIS BIRD FRIENDS (BAILEY)

10 minutes—sound—color $3.60 6

Chipmunks and squirrels are seen storing their winter supply of acorns underground while birds search for insects in a pine tree. Suddenly they discover a bird food pantry which children have provided for them. Many varieties of birds also come to eat the food and are seen in closeups. A "Chickadee Song" and a "Chipmunk Rhyme" are included. (Primary, Elementary)

CHOOSE TO LIVE (USDA)

20 minutes—sound $1.20 2

The fight of the United States Public Health Service against cancer. The causes of cancer, preventive measures, methods of treatment, and curing are clearly outlined. (Sr. High through Adult)

CHOOSING YOUR OCCUPATION (CORONET)

10 minutes—sound $1.80 3

"This is a picture about YOU!" From this opening sentence through the last scene the impact of this film is directed toward each individual member of the audience. Self appraisal, occupational possibilities, preparation requirements and guidance facilities are a few of the ideas perfectly integrated here for the benefit of vocational guidance classes. (Jr. High through Adult)

A CHRISTMAS GIFT (EBF)

6 minutes—sound—color $2.40 4

This delightful film tells a heart warming story of children at Christmas time. Planned as an incentive for primary grade reading, the film utilizes familiar home and school situations to capture and hold the attention of youngsters. The story revolves about young Jerry and Linda who learn a valuable lesson about the spirit of Christmas. (Primary)

CHUCK TAYLOR'S FUNDAMENTALS OF BASKETBALL (BAILEY)

11 minutes—sound $1.20 2

In this fine film we learn something of team strategy while the technique of shooting, passing, dribbling, defensive and offensive ball handling is demonstrated. We also see that proper footwork is very important in basketball. (Jr. High through Adult)

Unit Value

CIRCUS ANIMALS (ACADEMY)

11 minutes—sound—color $1.80 3

A companion picture to CIRCUS PEOPLE, revealing, in natural color, fascinating circus animals—their care, training habits, etc. These films are authentic and produced under expert direction and keyed to fit the requirements of lower grade curricula. (Primary and Elementary)

CIRCUS DAY IN OUR TOWN (EBF)

15 minutes—sound $2.40 4

Describes vividly the excitement and drama of circus day, depicting not only the highlights of the performance itself, but many of the preparations necessary for staging the big show. Provides an unforgettable ringside view of circus animals in a variety of spectacular acts, and acrobats and clowns in their breathtaking routines. (Primary and Elementary)

CIRCUS PEOPLE (ACADEMY)

11 minutes—sound—color $1.80 3

An interesting film for primary grades, depicting behind-the-scenes circus activity. Selection of scenes and narration are designed to develop proper atitudes of work and cooperation and offer stimulation for oral composition and foundation for reading readiness. (Primary and Elementary)

CITIES: HOW THEY GROW (EBF)

10 minutes—sound $1.80 3

Explains factors which determine the location and growth of cities. Shows the general trend toward organization throughout the United States. Various types of cities and city plans are presented. Factors involved in the decentralization of the city into the metropolitan area are clearly presented. The film includes the prevailing trends of city planning. (Jr. High through College)

CITY, THE (MuseumModArt)

30 minutes—sound $2.40 4

A survey of the problem of planning community living in America, embodying the views of the American Institute of Planners. Contrasts the turmoil of the planless city with the color and spaciousness of the small planned community. (Jr. High through Adult)

CITY WATER SUPPLY (EBF)

10 minutes—sound $1.80 3

Animated drawings describe the relation between rainfall and life; the sources of city water supply—wells, rivers, lakes, and watershed; water-borne diseases; and methods of water distribution. (Jr. and Sr. High)

CIVIL WAR (EBF)

14 minutes—sound $3.00 5

Chronologically follows the most important military events of the war between the North and the South, stressing social, economic, and geographical factors which ultimately forced the South to capitulate. Techniques such as animated drawings portray in an imaginative and realistic way the strategy and geographical set-

Unit Value

ting on which the war was fought. (High School and Adult) (American History)

CLASSROOM QUIZ No. I (ASSN. OF AM. RR)

10 minutes—sound—color $1.20 2

A film quiz about passenger train transportation. (Elementary and Jr. High)

CLASSROOM QUIZ No. II (ASSN. OF AM. RR)

10 minutes—sound—color $1.20 2

A film quiz about freight train transportation. (Elementary and Jr. High)

CLEANLINESS AND HEALTH (CORONET)

10 minutes—sound $1.80 3

Students wll never again believe that old saying, "A little dirt won't hurt you!" after seeing this important film. This is the story of David . . . his visit to a doctor . . . of the lessons of cleanliness which the doctor impresses upon him. Through amazing photomicrography, the existence of dangerous tiny organisms all around us is demonstrated, and the importance of cleanlines to good health is soundly established. (Primary through Jr. High)

CLOUD IN THE SKY (TB)

10 minutes—sound $1.20 2

Opening with scenes of a lively fiesta, the tempo of this film quickly changes to one of sadness; death has come to the mother of a family. Through an absorbing story, the modern ways of thwarting tuberculosis are shown, and a theme that might easily have ended with tragedy culminates in a scene of gaiety. (Jr. High through Adult)

CLOUDS (USWB)

11 minutes—sound $1.20 2

Various types of clouds are shown, and the movement of high and low pressure areas across the country is described. Weather forecasting as the result of cloud study is discussed. (Jr. High through Adult)

COLLEGE: YOUR CHALLENGE (CORONET)

10 minutes—sound $1.80 3

A presentation of the benefits of college, both academic and non-academic, which high school students may expect. Methods of dealing with financial problems and a possible call to military service are considered, along with other obstacles, thus providing a sound basis from which further discussion and individual consultation may proceed. (Sr. High)

COLLOIDS (EBF)

10 minutes—sound $1.80 3

Illustrations of fog (liquid in gas), whipped cream (gas in liquid), clay and india ink (solid in liquid), smoke (solid in gas), and mayonnaise (liquid in liquid). (Jr. High through College)

COLOMBIA (OIAA)

10 minutes—sound—color $1.20 2

Unit Value

The old port of Barranquilla and the fine towns of Bogota and Cartagena, along with scenes of the countryside. Trends toward modern industrilization are noted. (Elementary through Adult)

COLOMBIA AND VENEZUELA (EBF)

11 minutes—sound $1.80 3
Describes the human and economic geography, topography and climate. Shows the several types of people that live here and their work—farming, mining, shipping, manufacturing. Animated map drawings show the extent of Colombia-Venezuela world trade in the import and export of products. (Elementary through Adult)

COLOMBIA, CROSSROADS OF THE AMERICAS (OIAA)

27 minutes—sound $1.20 2
An introduction to the life in Colombia from a geographic, social, and economic standpoint. Produced by Julien Bryan, the film depicts family life as well as Colombian industries dealing in oil, coffee, and minerals. (Elementary through Adult)

COLONIAL CHILDREN (EBF)

11 minutes—sound $1.80 3
This film is an authentic reproduction of a Colonial family's day from the morning chores and breakfast to the reading of the Scriptures in the evening. Gives detailed home furnishings, clothing, customs, and events with conversations by the cast. (Primary through Jr. High)

COLONIAL EXPANSION (EBF)

11 minutes—sound $1.80 3
Colonial development in America from the point of view of the influence of each of the great powers, Spanish, French and English, tracing in detail the struggle for control which finally ended with the English being almost completely supreme. (Elementary through Adult)

COLONIAL LIFE IN THE SOUTH (CORONET)

15 minutes—sound—color $4.80 8
In following the journey of a surveyor who visits a frontier tobacco farmer and a tidewater plantation owner, the characteristic social economic life of the southern colonies in the pre-revolutionary period are shown. Filmed at authentic colonial restorations, many utensils, household articles and fashions of the period are shown to create the feeling and mood of life in the southern colonies. (Intermediate, Junior High, Senior High)

COLOR KEYING IN ART & LIVING (EBF)

11 minutes—sound—color $3.60 6
A study of color relationships. Employs abstract demonstrations of color deceptions followed by practical applications. Color relations are applied to art subjects and to aspects of everyday life such as hair, eyes, complexion, dress and home decoration. (Jr. and Sr. High)

COLORADO RIVER (CORONET)

10 minutes—sound $1.80 3
Our cameraman contrasts the untamed fury of the Colorado's ero-

Unit Value

sive force with the disciplined beauty it displays when harnessed. Hoover, Parker and Imperial Dams have turned the Colorado into one of the world's greatest sources of electrical power, made it the site of recreational resorts and reclaimed the Imperial Valley from a barren desert—a demonstration of man's engineering genius as it assists nature. (Elementary through Sr. High)

COLOUR IN CLAY (EBF)

10 minutes—sound—color $3.60 6

Created in a famous pottery-making section of England, this film portrays modern commercial pottery-making in an authentic setting. It is designed to show the successful combination of art principles with modern technological methods. Mixing and shaping the clay, applying decorations, firing and glazing are shown with clever direction and superb photography. (Jr. and Sr. High)

COLUMBIA ADVENTURE (NFB)

13 minutes—sound—color $1.20 2

A California engineer and his family enjoy the wonders of the Columbia River watershed as they motor from the river's mouth at the Pacific to its source in the Canadian Rockies. (Jr. High through Adult)

COLUMBUS AND THE DISCOVERY OF AMERICA (HOFFBERG)

8½ minutes—silent $1.20 2

Made by a group of children in the Vancouver, British Columbia, school. Gives the most important facts about Columbus and his explorations in simple form. (Elementary and Jr. High)

COMBAT AMERICA (OWI)

63 minutes—sound—color $1.20 2

"Combat America" relates the most sustained, exciting, and deadly aerial battles to come from the cameras of the U. S. armed forces. Major Clark Gable gives a vivid story of the fighting and bomb bays of the B-17's on their early devastating raids over Germany and occupied France. This hour-long documentary film pulls no punches, showing American casualties as well as those of the Luftwaffe, then still in its full effectiveness. The film follows the Flying Fortress crews of the 351st Bombardment Group from the end of their training at a Colorado training field to actual combat over Germany. Gable also acts as narrator. (Jr. High through Adult)

COMMON ANIMALS OF THE WOODS (EBF)

10 minutes—sound $1.80 3

Pictures the squirrel, rabbit, raccoon, porcupine, otter, mink, beaver, possum, skunk and woodchuck. In each instance the distinguishing characteristics of the animal are shown such as the ability of the beaver to build a dam and the habit of the mother possum carrying her young. (Primary through Jr. High)

COMMON COLD (EBF)

10 minutes—sound $1.80 3

Illustrates vividly the facts known about the common cold, its care, and secondary infections that may grow out of it. Tells the story of a boy who contracts a cold and visits his doctor for treatment and advice. Reveals, by means of the doctor's illustrated

Unit Value

explanation, why the common cold is serious and how it should be treated. (Primary and Elementary)

COMMUNITY GOVERNMENTS: HOW THEY FUNCTION (CORONET)

13 minutes—sound $2.40 4

If a good community government is to function its citizenry must participate. Citizens of Riverside, dissatisfied with their community, look into the advantages and disadvantages of the mayor-council, city manager, and commission forms of government—and learn that the active participation of the people and their cooperation in solving problems of local government, is an integral part of community progress. (Jr. High through Adult)

CONGRUENT FIGURES (KB)

12 minutes—sound $1.80 3

Illustrates the geometric principles of "equal sides and equal angles," and clarifies methods for finding and proving that angles and sides are equal. (Sr. High and College)

CONSERVATION OF NATURAL RESOURCES (EBF)

10 minutes—sound $1.80 3

Three natural resources hold the center of attention in this film: water power, forests, and farm lands. Early wastes in the lumbering industry and agriculture are delineated, and the appalling results of these are shown. This is followed by an explanation of steps which have been taken and are now being planned to conserve these resources. Effects of wind and water erosion and unwise farming scenes from the Dust Bowl, and local and federal efforts to check these abuses are shown. (Jr. High through College)

CONSTITUTION OF THE UNITED STATES, THE (EBF)

16 minutes—sound $3.00 5

A written constitution, binding upon all citizens, is the foundation of our democratic system. Its makers were men well fitted for great works, but this far-reaching document was their supreme accomplishment (Junior and Senior High)

CONSTRUCTION OF A LIGHT AIRPLANE (PA. SC)

22 minutes—sound $1.20 2

Photographed at the Piper Aircraft Corporation in Lock Haven, Pa. This film is an educational treatment of the building of a light airplane. Covers completely the construction of four of the five major parts of the airplane—the fuselage, landing gear, tail surfaces, and the wing. Engines are not shown because they are bought by the factory completely assembled. (Jr. High through Adult)

CONSUMER PROTECTION (CORONET)

10 minutes—sound $1.80 3

The Whites, who buy on the basis of price and appearance alone, often make foolish purchases; but the Kings, who take advantage of information available from both government and private consumer services, are adequately protected in their buying and enjoy

Unit Value

the improved standard of living which your students should also share. (Jr. High through Adult)

CONSUMPTION OF FOODS (EBF)

10 minutes—sound $1.80 3

Presents authentic material concerning food needs and deficiencies of the world's peoples. Standards for caloric intake and a balanced food consumption guide are developed. Adequacy of food consumption in major population regions of the world is analyzed and compared with caloric standard and balanced food consumption guides. Problems related to bringing consumption levels up to desirable standards are posed and ways of solving them are depicted. (Jr. High through College)

CONTROL OF BODY TEMPERATURE (EBF)

11 minutes—sound $1.80 3

By means of laboratory demonstrations, animated drawings, and special photography, phenomena associated with variations of body temperature in animals and man are shown. Foods are designated as the source of body heat, and the roles of nerves, glands and muscles in its control are portrayed. The blood stream is depicted as the distributor of heat, and the function of the hypothalamus is compared to that of a thermostat. (Jr. High through Adult)

CONTROL OF WORMS IN HOGS (USDA)

28 minutes—silent $1.20 2

Methods of control of various injuries done by the many parasites which attack hogs. (Sr. High and College)

CONTROL YOUR EMOTIONS (CORONET)

13 minutes—sound $2.40 4

Here psychological concepts are applied to the practical work of emotional control. Beginning with the stimulus-response pattern, the film interprets control in varying situations as altering the stimulus or changing the response. The important methods of changing either stimulus or response are shown, and many sound simple suggestions for emotional control are presented. Examples of these are: standing off and looking at oneself, not trying to do things too difficult too fast and learning to laugh at oneself. (Jr. High through Adult)

COOKING: PLANNING AND ORGANIZATION (YA)

11 minutes—sound $1.80

Illustrates a well-ordered kitchen in which the housewife has organized the kitchen equipment and cooking utensils for greatest efficiency in her work. Shows what can happen when the preparation of a meal is attempted without adequate planning, and how such troubles can be remedied by planning and by the use of such devices as the Time-Chart. (Jr. High through Adult)

COOPER, JAMES FENNIMORE (EBF)

20 minutes—sound $2.40 4

The reasons for Cooper's literary greatness become strikingly apparent in this moving story of significant incidents in his life. We see him grow from a young man, dreaming of pioneer adventure of the frontier, to a mature, distinguished novelist, forcing his

Unit Value

earlier dreams into vicarious reality by creating the first great American novels based on the American frontier scene. (Elementary through Adult)

CORN FARMER (EBF)

11 minutes—sound $1.80 3

This film gives a clean, concise picture of the problems and methods of the Iowa corn grower, using a typical corn belt family as its model. Depicted are the family's activities in planting. harvesting, and marketing . . . as well as incidental interests such as crop rotation, home canning, and politcs. A wonderful teaching film, suitable for geography classes from fifth grade up, and for economics, home economics, and social problems. (Elementary through Sr. High)

CORSICA (FF)

10 minutes—sound $1.20 2

French and Allied landing in Corsica. General de Gaulle's visit to Corsica. Views of the country, customs, dances, and most important cites of Corsica. (Elementary through Adult)

COTTON (EBF)

10 minutes—sound $1.80 3

Tells the story of the making of cotton cloth, from the picking of the boll in southern fields to the packing and shipping of the finished cloth as it comes from the looms of a modern mill. Hand-picking of cotton is contrasted with the work of a modern mechanical picker. The cotton is here shown being ginned and baled, shipped to the mill, where it is carded, spun into yarn and woven into cloth. The operation of each machine is vividly portrayed. (Elementary through College)

COTTON AT WAR (OWI)

13 minutes—sound $1.20 2

COTTON AT WAR leaves no doubt as to the vital importance this material plays in our efforts for victory. Combat and training scenes show vividly that virtually everything that shoots, flies, floats, rolls, or walks has cotton as an integral unit and would be useless without it. (Elementary through Adult)

COTTONTAIL (MoStateDeptCons)

55 minutes—sound—color $1.20 2

This is the story of the cottontail rabbit and the place he plays in the conservation cycle. (Junior High through Adult)

COURTESY FOR BEGINNERS (CORONET)

10 minutes $1.80 3

The fundamentals of courtesy—such as being considerate to a guest, making correct introductions, saying the magic words, *please, thank you* and *excuse me*—are presented in a variety of role-playing activities which will delight a young audience. (Primary, Intermediate)

COW AND THE SPRITE (CORONET)

10 minutes—sound $1.80 3

From Scotland and Ireland have come some of our most enchanting fairy tales, yet their fame has been limited. This film brings to the

Unit Value

screen an adaptation of a charming old folk story that tells of the happiness of a man and of what this happiness is composed. (Primary and Elementary)

CRADLE OF RELIGION (HWO)

8 minutes—sound $1.20 2

This film portrays religions as they are practiced in Egypt today. For the first time actual scenes of Moslems at prayer are shown in Egypt's great Mohammed Ali Mosque. Also pictured are one of the world's oldest synagogues, ancient St. Catherine's Monastery at Mt. Sinai where God gave Moses the Law of the Ten Commandments, and the Boutros Ghali church in Cairo, showing members of the Coptic faith attending services. (Jr. High through Adult)

CREATING CARTOONS (BAILEY)

10 minutes—sound $1.80 3

Using humorous animation, this film introduces students to the methods of the cartoonist. Shows the use of the circle in creating the rough first drawing, how to draw expressions by observation and simplification, how to express action and movement, and how to simplify and exaggerate for effect and humor. (Jr. through College)

CROP THAT NEVER FAILS, THE (USDA)

9 minutes—sound $1.20 2

This crop is the savings bonds you buy. They are a bulwark against bad times. The film pleads for wise buying and saving rather than thoughtless spending which swells the balloon of inflation. (Jr. High through Adult)

CRUSADE

11 minutes—sound—color $1.20 2

Crusade presents the story of the Society's three-fold program of research, education, and service in colorful, dramatic terms. It is a film of highest professional quality with a memorable comentary spoken by Spencer Tracy. Crusade is usable the year around as a clear, elequent statement of the Society's program and the part played by volunteers in it. It depicts the volunteer effort to save lives now through education, to give help to the cancer patient; and it stresses our hope for the future through our national research program. (Adult)

CUBA: THE LAND AND THE PEOPLE (CORONET)

10 minutes—sound $1.80 3

Close relationship between Cuba's tropical climate and the land itself is drawn in this timely picture of modern Cuban life. The Spanish background, the strategic value of the island to American security and the economic ties of Cuban products to the economy of the United States are shown—all in terms of the people of Cuba. (Elementary through Sr. High)

CUERNAVACA (OIAA)

10 minutes—sound—color $1.20 2

Takes us on a visit to three beautiful Mexican towns—Cuernavaca, Taxco, and Acapulco. Cuernavaca, a week-end resort, with its modern homes, beautiful flowers, and ideal climate; Taxco, a silver

Unit Value

mining town; and Acapulco, a town whose history is as colorful as its colorful surroundings—all make for a diverting film subject. (Elementary through Adult)

CURING PORK COUNTRY STYLE (USDA)

17 minutes—sound $1.20 2

Shows how to cure pork by the "dry" and "brine" methods. Emphasizes such main essentials as chilling the meat to keep it cold. Using proper amount of ingredients, and giving the meat the proper amount of time to absorb the salt. One sequence shows how to construct a farm smokehouse. (Sr. High through Adult)

CURIOUS COATI (YA)

8 minutes—sound $1.80 3

A simple and amusing animal story for children of the five to eight year old group, describing the adventures of a pair of coatis. The coati (or coatimundi) is a small Central and South American animal related to the racoon. This film can be used to stimulate and develop oral and written language expression. (Primary)

CUTTING A TAPER WITH COMPOUND REST (C)

10 minutes—sound $1.20 2

Shows the operations necessary to cut a sharp and slight taper on a gear blank. Considerable detail and emphasis are given to the care and operation of the machine, the use of the compound rest for turning a sharp angle surface, the setting of a compound for turning any angle within its range, the setting of the tool for taper turning, the principles of the taper attachment, the correct setting of the taper attachment for the given angle, and the use of a protractor and a ring gauge for checking the angle of taper. (Sr. High and College)

CUTTING AN EXTERNAL NATIONAL FINE THREAD (C)

12 minutes—sound $1.20 2

Describes various shapes of threads and their uses, giving the characteristics of the National Fine Thread, and showing the procedures used to cut a thread on a lathe. (Sr. High and College)

CUTTING KEYWAYS (C)

15 minutes—sound $1.20 2

Shows the setting up of a shaft on the table of the milling machine for cutting a keyway at each end, the selection of the proper cutting, the determination of the correct speed and feed, and the setting of the machine for the correct depths and length of cut. (Sr. High and College)

DAIRY FARM (CORONET)

16 minutes—sound $1.80 3

Setting for this motion picture is the richly productive areas of a small Midwestern dairy farm. With all the fresh charm of the country, this film shows the farmer at work cultivating, harvesting, and preparing feed crops; the dairymen feeding the cows, milking and preparing the milk for market; the children helping with the farm chores and learning the active routine of life on a dairy farm. (Primary through Jr. High)

Unit Value

DANGEROUS STRANGER (Sid Davis)

10 minutes—sound $1.80 3

Impresses the child with the need to be on guard against molesters, and not to become friendly with strangers. Dramatizes places and circumstances under which the child may encounter dangerous strangers. (Primary through Adult)

DARE—BIRTHPLACE OF AMERICA (UNC)

20 minutes—sound—color $1.20 2

An historical documentary film dealing with the first English colony to America, Sir Walter Raleigh's "Lost Colony," and with Virginia Dare. Also portrays Orville and Wilbur Wright's first power-driven plane flights in 1903-08 at Kitty Hawk. The acceptance of these two "New Worlds" took place in what is now Dare County, North Carolina. Cooperation of the Lost Colony Drama made possible filming of many historic shots. Stock footage of an early Wright Brother's flight and interviews with men who knew the Wright Brothers are also significant. (All Age Groups)

DASHES, HURDLES AND RELAYS (EBF)

22 minutes—sound $1.80 3

The first part of this film is explanation of the dashes—100 meters, 200 meters, and 400 meters. Demonstrations are given in normal speed and slow motion. The second part presents the hurdles and relays. (Jr. High through College)

DATE ETIQUETTE (CORONET)

10 minutes—sound $1.80 3

This film shows how to be socially comfortable during the various steps in dating—asking for a date, the acceptance, calling for the girl, meeting her parents, attending a school event, eating out afterwards, and how to say goodnight. All of these everyday situations are tactfuly handled so young people will be encouraged to use good date etiquette and, in turn, gain poise and a greater sense of personal security. (Jr. and Sr. High)

DATING DO'S AND DONT'S (CORONET)

13 minutes—sound $2.40 4

By showing the progress of an idealized date, from the idea, asking and accepting, to the date itself and the final good night, this film raises some important questions regarding dating, and suggests partial answers as guides for discussion. Such questions as "Whom do you choose for a date?" "How do you go about asking for a date?" or "How do you say good night?" help to stimulate free discussion of dating and the problems connected with it. (Jr. and Sr. High)

DAVID COPPERFIELD, THE BOY (TFC) (See regulations—last page)

40 minutes—sound $4.80 8

This first part of Charles Dickens' story of David Copperfield opens with scenes in his infancy; and is followed by his visit to the seaside with Peggoty, running into difficulties in his step-father's home, experiences in London, the trip to Dover, pleasant relationships at the home of his aunt, and his final departure from school. (Jr. and Sr. High)

Unit Value

DAVID COPPERFIELD, THE MAN (TFC) (See regulations—last page)

40 minutes—sound $4.80 8
David's home-coming upon graduation from school, the London trip marking his first step toward a career, his marriage and life with Dora, and his final experiences in revealing the true nature of Uriah Heep, conclude the film version of this great literary masterpiece. (Jr. and Sr. High)

DAVIS CUP TENNIS, 1947 (AFS)

20 minutes—sound—color $2.40 4
Produced through the courtesy of the U. S. Lawn Tennis association. This film covers the highlights of the five matches played between Australia and the United States at Forest Hills, Long Island. A large portion of this film is in slow motion. (Sr. High and College)

DAVIS CUP TENNIS, 1954 (U.S. LAWN TENNIS ASS'N)

45 minutes $2.40
Shows how the United States tennis team wins the Cup, defeating Australia. Highlights of the play in the interzone final between United States and Sweden, and in the Challenge Round against Australia when Trabert and Seixas defeat Hoad and Rosewall in singles and doubles.

DAY AT THE FAIR (EBF)

10 minutes—sound $1.80 3
Three farm youngsters go to the fair to exhibit their calves and pigs. We see them tending their livestock, watching the judging, and taking in the displays and other sights. One boy wins a prize for his calf and later all three frolic on the midway. (Primary through Jr. High)

DAY IN COURT (ModernTP)

29 minutes—sound $1.20 2
Stresses the need for safe and courteous driving. Features Judge Robert Alton Pfaff presiding at the Los Angeles Traffic Court bench. Seven major types of traffic offenders pass before him for sentencing while flash-back scenes show how their inconsiderate driving habits result in property damage, injury, and even death. (Jr. and Sr. High)

DAY IS NEW (OIAA)

11 minutes—sound $1.20 2
A day in the life of the Mexican people. Picturing their varied daily activities. (Elementary through Adult)

DAY OF THANKSGIVING (YA)

13 minutes—sound $3.60 6
The five members of the Johnson family, typical of all American families, use Thanksgiving as the occasion for adding up all the freedoms and privileges they enjoy under the American way of life. A powerful film on Americanism for all Americans all year 'round (Jr. High through Adult)

DAY WITH ENGLISH CHILDREN (CORONET)

10 minutes—sound $1.80 3

Unit Value

In the town of Bath, your students will spend an entire day with English children . . . a day of breakfast, and school, and classes, and playing cricket, and coming home to study. By the time this film-day is done they'll realize that although these British youngsters have many different customs, they really have a great deal in common with us. (Elementary through Sr. High)

DEATH OF STONEWALL JACKSON, THE (YA)

27 minutes $3.00 5

May 10, 1863, the day on which the death of Stonewall Jackson is a presage of coming disaster for the Confederate forces. Provides an insight into the problems of the war as reflected in this event. (Jr. High through Adult)

DECIMALS ARE EASY (CORONET)

10 minutes—sound $1.80 3

By following an inductive plan, this film teaches that decimals are an integral part of our number system. First they are used as an important element of everyday living. Then, with this background, the film points out and shows what they mean in terms of the whole decimal system of numbers. Slightly more difficult computations are given at the close of the film, summarizing addition, subtraction, multiplication, and division of decimals. (Elementary and Jr. High)

DECLARATION OF INDEPENDENCE BY THE COLONIES, THE (EBF)

16 minutes—sound $3.00 5

The circumstances and results of this historic statement of democratic principles have stirred men's hearts many times and in many places. "Life so dear and peace so sweet" were risked in the cause of liberty; for some the price was death, but for future generations the prize was freedom. (Junior and Senior High)

DEER AND ITS RELATIVES (CORONET)

10 minutes—sound $1.80 3

Here is an opportunity for students to observe the wide variety of adaptations of members of the same family for living in different parts of the world. The whitetailed deer, the fallow deer, the elk, bactrain camel, dromedary camel, alpaca, llama, and giraffe exemplify the tremendous differences between related animals living under different conditions of environment around the world. (Primary through Jr. High)

DEFENDING THE CITY'S HEALTH (EBF)

11 minutes—sound $1.80 3

Describing the factors which effect the health of cities, this film shows the work of a model city health department. Activities shown include education, gathering statistics, nursing, supervising sanitation, laboratory analyses, child hygiene, and the control of communicable diseases. The role of the individual citizen in a health program is stressed. (Jr. High through College)

DEFENSE AGAINST INVASION (UWF)

12 minutes—sound—color $2.40 4

Walt Disney, through animation and actual photography, explains in an amazingly simple and entertaining fashion how

Unit Value

vaccination makes the body immune from disease. (Elementary through Adult)

DEFENSIVE FOOTWORK IN BASKETBALL (EBF)

10 minutes—sound $1.80 3

Wilbur Johns, Basketball Coach, U.C.L.A., teaches the fundamentals of good defensive footwork; proper stance, striding with an opponent, watching, checking, maneuvering him out of position, correlation arm movement with footwork, turning, pivoting and getting into position for taking the ball on the rebound, all illustrated with interesting game shots. (Jr. High through College)

DEFINING DEMOCRACY (EBF)

18 minutes—sound—black and white $2.40 4

The film stresses the importance of defining terms before starting a discussion on democracy and despotism. Several definitions are presented to clarify terms used throughout the film. A community is democratic when its citizens share in the making of important decisions and when they can do so through secret elections. The film concludes that if a community works to balance its economy and enlighten its citizens, it can achieve shared power and shared respect. (Sr. High through Adult)

DENTAL HEALTH: HOW AND WHY (CORONET)

10 minutes—sound $1.80 3

This film presents a dramatic review of what research and experimentation have done to promote better dental health for the American public. The film brings you an up-to-date report on diet and its relation to the growth and decay of teeth, new sodium fluoride applications, and the latest techniques of oral hygiene. The coveted seal of approval of the American Dental Association has been awarded to this film. (Elementary through Sr. High)

DESCRIBING AN INCIDENT (CORONET)

10 minutes—sound $1.80 3

So often, when we talk to people or write, we want to describe an incident—something amusing or unusual that happened. Here we have an incident poorly described and the same incident interestingly, completely, colorfully described. This film will stimulate class interest in the development of descriptive ability. (Elementary through Adult)

DESERT VICTORY (BIS)

60 minutes—sound $1.20 2

A very vivid story of the British Eighth Army's smashing victory at El Alamein and its triumphant advance across the desert to Tripoli. (Sr. High through Adult)

DESIGN OF AMERICAN PUBLIC EDUCATION (McGRAW-HILL)

16 minutes—sound $2.40 4

The organizational structure of American public education, first as it might be if it were an 'assembly line' educational process controlled centrally, and as it actually is in a democratic society—constitutional delegation of education to the various states with decentralization and state supervision, a system that develops responsible citizens in a democratic society. (College and Adult)

Unit Value

DESK FOR BILLIE, A (NEA)

57 minutes—color $1.00

Shows how America's schools open their doors to all children, regardless of wealth or poverty. This effective public relations film can be show to the public as a background for panel discussions or valuable commentary about the school system in any community.

DEVELOPING FRIENDSHIPS (CORONET)

10 minutes—sound $1.80 3

Most young people want to learn how to make friends—and keep them—and this motion picture sets the stage for acquiring this important social value. It explores the differences in individual capacities for friendliness and helps young people understand the meaning of friendship. Audiences will see how a "teenager" learned to be a friend and how his new attitude led him to appreciate and enjoy persons of many varying backgrounds and personalities.

DEVELOPING RESPONSIBILITY (CORONET)

10 minutes—sound $1.80 3

This appealing story of a boy, and of the dog he wants very much, teaches lessons in responsibility that your students will understand and remember. They will realize that although responsibilities often entail hard work, difficult decisions, and missing out on some fun . . . and that a fuller, happier life will be theirs. (Primary through Jr. High)

DEVELOPING SELF-RELIANCE (CORONET)

10 minutes—sound $1.80 3

How dependency grows and how necessary self-reliance is to all successful endeavor and happiness is shown in this motion picture. It analyzes the steps in developing self-reliance as: (1) assume responsibility; (2) be informed; (3) know where you are going; and (4) make your own decisions. A careful distinction is drawn between dependence—which is undesirable—and seeking advice and help, which is part of being intelligently self-reliant. (Jr. and Sr. High)

DEVELOPING YOUR CHARACTER (CORONET)

10 minutes—sound $1.80 3

What good character is and how it can be achieved in order to live more happily and more successfully is brought out in this unusual production. Influences from the home, church, school and friends which mold an individual's character are described and a guide to developing this character is presented. (Jr. High through Adult)

DEVELOPMENT OF COMMUNICATION (EBF)

10 minutes—sound $1.80 3

The most important aspects of the long story of man's human communication are shown. Not only are the devices of communication given, but also the social, cultural, and economic effects upon human living of these devices. (Jr. High through Adult)

DEVELOPMENT OF TRANSPORTATION (EBF)

10 minutes—sound $1.80 3

Transportation developments within the United States during the past one hundred and fifty years. (Jr. High through Adult)

Unit Value

DIARY OF A SERGEANT (OWI)

22 minutes—sound $1.20 2

A real-life story of the rehabilitation of an American soldier who sacrificed both his hands for his country. Modern surgical science and a wise psychological program have given him a new chance for normal, happy living. It is a stirring actual drama that follows him up to the moment of his return to civilian life, climaxing when friends and relatives greet him without a sign of strangeness. (Sr. and College)

DICKENS, CHARLES: BACKGROUND FOR HIS WORKS (CORONET)

10 minutes—sound $1.80 3

To know and understand the writings of Charles Dickens, a reader must know and understand London, and the times of Dickens. Such a social setting is provided here. Filmed in England which Dickens described so well, this motion picture offers clues to interpretation and a rich sense of his significance. (Jr. High through Adult)

DIGESTION OF FOODS (EBF)

10 minutes—sound $1.80 3

Both the mechanical and the chemical aspects of digestion are presented in this film, together with their controlling factors. Among the mechanical processes included are mastication, swallowing, stomach contractions, intestinal segmentation, and intestinal peristalsis. Among the chemical processes are the production of saliva and the action of pepsin on albumin, and the production of pancreatic juice and the action of lipase on fats. (Jr. High through College)

DISCOVERY AND EXPLORATION (EBF)

10 minutes—sound $1.80 3

Uses animated drawings to describe the North American territory involved during the period of discovery and exploration from 1492 to 1700. Shows routes followed by explorers from the old world in seeking new routes to the East, Spanish conquests, and the mid-continent development. (Jr. and Sr. High)

DISCUSSION IN DEMOCRACY (CORONET)

10 minutes—sound $1.80 3

In this excellent film a typical group of students learn, through expert advice and their own experiences, the importance of discussion in democracy. This film develops a threefold program for democratic discussion: 1) Preparation, 2) Planning, 3) Personalities. (Jr. High through Adult)

DISTANCE RACES (EBF)

11 minutes—sound $1.80 3

Includes races from 1,000 to 10,000 meters and the steeplechase. The style of the distance runner is contrasted with that of the dash man. Slow-motion scenes analyze particular movements. (Jr. High through College)

DISTRIBUTING AMERICA'S GOODS (EBF)

11 minutes—sound $1.80 3

Based on a comprehensive study of The Twentieth Century Fund, shows by animated drawings and direct photography why it costs

Unit Value

as much as it does to distribute America's goods. Sequences are devoted to the distribution costs of the producer, wholesaler, retailer, and transportation. Shows how fifty-nine cents out of every purchase dollar goes to pay for the distribution of the article. A final sequence indicates ways in which distributors and consumers can cooperate to reduce distribution costs. (Jr. and Sr. High)

DISTRIBUTING HEAT ENERGY (EBF)

11 minutes—sound $1.80 3

Four sequences of scenes make up the content of this film. First sequence: deals with different kinds of heat sources; second sequence, demonstrates how furnace fuels are burned in coal, oil, and gas furnaces. The third sequence treats the development of home heating from the Colonial fireplace to the modern steam radiator. In the fourth sequence the mechanics of heat transfer by conduction, by convection, and by radiation are explained. (Jr. High through College)

DISTRIBUTION OF FOODS (EBF)

10 minutes—sound $1.80 3

Presents authentic material concerning the technical developments and economic problems in the preservation and transportation of foods. A photographic sequence shows how food transportation and preservation have enormously increased possibilities for distributing perishable foods on a world basis. Illustrates problems of family income, and of maintaining of flow of food from producer to consumer. Animated map backgrounds are used in showing tariffs as barriers to intercontinental movement of foods. (Jr. High through College)

DIVISION IS EASY (CORONET)

10 minutes—sound $1.80 3

This film helps a class to understand division, to know why division is important, and to know what to learn in order to master this basic arithmetical process. The film may be used to introduce the study, to enrich it, or to review it in later grades. By bringing to the class an easily understood problem situation and clear-cut demonstration of division in action, the film helps solve some of the difficult problems in teaching division. (Primary through Jr. High)

DO BETTER ON YOUR EXAMINATIONS (CORONET)

10 minutes—sound $1.80 3

Four basic rules that students can follow to do better on their examinations are presented in this film. They learn how to cultivate a positive attitude toward tests by understanding the purposes, objectives and values of examinations. (Jr. and Sr. High)

DO UNTO ANIMALS (USDA)

21 minutes—sound $1.20 2

Approved methods of transporting and handling livestock that will reduce yearly loss from injuries received in marketing process. (Sr. High and College)

DO WORDS EVER FOOL YOU? (CORONET)

10 minutes—sound $1.80 3

Unit Value

In simple personal conversation, in screaming newspaper headlines, in radio commercials, printed advertisements, in politics—in every phase of our word-dependent lives—word trickery can have serious consequences. Not only does this simple, effective film story graphically illustrate the nature of the danger, but it lucidly outlines specific precautions for your students to prevent confusion in word meanings. (Elementary and Jr. High)

DO YOU KNOW HOW TO MAKE A STATEMENT OF FACT? (Ind. U.)

27 minutes $4.80 8

Discusses the difference between statements of fact and statements of inference. Emphasizes the importance and consequences of being aware of these differences. Provides numerous examples of statements of fact and inference. Points out how these statements can be distinguished one from the other. Through additional examples, shows that when a person is not aware that there is a difference between fact and inference, he may act as if inference is fact. (College, Adult)

DOCTOR, THE (EBF)

11 minutes—sound $1.80 3

Portrays the significant role of the doctor in modern society. Follows a child specialist through a typical day's activities—at his office, at the hospital, and at the home of a patient. We see Dr. Cramer giving a young boy a routine physical examination, vaccinating a baby for smallpox, visiting his hospital patients, and diagnosing a case of measles.

DOCTOR SPEAKS HIS MIND (AM. CANCER)

20 minutes—sound $1.20 2

Describes various symptoms of cancer, how they may be detected and shows the happy outcome of patients who have sought treatment early. Designed to stimulate interest preceding a talk by a competent medical speaker. (Adult)

DODDER (EBF)

10 minutes—sound $1.80 3

Entire life story of the dodder, one of the best known of the group of parasitic flowering plants, is shown by means of time-lapse photography, accompanied by an explanatory narrative. Among the more impressive features is the presentation of the dodder twining about the host plant. Animation aids in revealing details in the strutcure and operation of the suckers. The destructive character of this plant is demonstrated, as well as the beauty of the flowers. (Jr. High through College)

DON'T BE AFRAID

12 minutes—sound $1.80 3

Tells the interesting story of how a young boy is helped by his mother to overcome his fear of the dark. Points out that many fears have a useful purpose by serving as a warning of danger. Explains how to determine whether a fear is a useful one or not, and how to go about overcoming undesirable fears, such as, fear of dogs, fear of water, and fear of what others might think. (All ages)

Unit Value

DON'T BE A SUCKER (C)

20 minutes—sound $1.20 2

Shows the techniques used by Hitler to divide peoples and makes a plea for Americans to be on guard against the same techniques in this country. An outstanding film showing the consequences of racial discrimination. A good message for all democratic people. (Sr. High through Adult)

DON'T GET ANGRY

12 minutes—sound $1.80 3

Explains anger as a natural emotion which cannot be entirely avoided but which can be successfully managed when faced in a mature way. Utilizes animation to show the effects of anger on the function of such organs as the heart and stomach. Reveals physiological changes during the period of excitement, and emphasizes need for the child to release his anger in a controlled manner. (Elementary through Adult)

DOUBLE PLAY KINGS (OSFS)

30 minutes—sound $1.20 2

Double Play Kings shows the techniques used in completing double plays as demonstrated by such players Lou Boudreau, Joe Gordon, Marty Marion, and other well-known players. (Jr. High through Adult)

DOWN WHERE THE NORTH BEGINS (OIAA)

28 minutes—sound—color $1.20 2

Shows Ecuador's most effective features of landscapes, buildings, and life. (Jr. High through Adult)

DRAMA OF STEEL (USBureauMines)

30 minutes—sound $1.20 2

Traces the history of steel-making from the crude charcoal furnaces of the ancients to the modern spectacular blast and open-hearth furnaces. (Sr. High and College)

DRAWING WITH PENCIL (EBF)

10 minutes—sound $1.80 3

Theodore Kautzky, well-known artist, demonstrates effective techniques in drawing a scene with pencil. Photographed as if through the eyes of the artist, the film emphasizes the following important points: general design; thumbnail sketching; preparation of the pencil point; drawing sharp lines; making broad masses; and achieving textures of wood, brick, shingles, stone, and foilage. (Jr. High through Adult)

DRILLING, BORING, AND REAMING (C)

10 minutes—sound $1.20 2

Presents in considerable detail the centering of a gear blank in an independent chunk, the selection and setting of the tool for facing the gear blank; drilling, boring, and reaming with the tail center; and reviews the use of the taper attachment in the making of a taper bore. The job selected for this demonstration is a rough steel forged pinion gear blank. (Jr. High through College)

Unit Value

DRIVING ECONOMICALLY (GM)

17 minutes—sound $1.20 2

Economical driving practices are suggested by a service station operator to a boy who has just received permission to drive the family car alone. Points are made both by the dialogue and by film sequences which illustrate the suggestions. Emphasis is placed on the fact that certain driving practices contribute to both safety and economy. Specific points covered include care of the car's finish, warming up of engine, proper use of clutch, efficient braking practices and effect of acceleration and speed on tire wear and gasoline consumption. (Sr. High through Adult)

DRIVER EDUCATION SERIES (FORD)

Automatic Transmissions

10 minutes—sound $1.20 2

An explanation of the principles of design and operation of automatic transmission systems. (Sr. High through Adult)

Care of the Car

12 minutes—sound $1.20 2

The maintenance of an automobile: the regular care necessary to keep the car in good condition. (Sr. High through Adult)

Driving At Night

8 minutes—sound $1.20 2

Demonstration of the special problems and special techniques of safe driving at night. (Sr. High through Adult)

Driving In the City

12 minutes—sound $1.20 2

A number of the difficulties encountered in city traffic and suggestions for good driving practices. (Sr. High through Adult)

Driving On the Highway

12 minutes—sound $1.20 2

The safe operation of an automobile on today's highways. (Sr. High through Adult)

Driving Under Adverse Conditions

12 minutes—sound $1.20 2

Enumeration of various adverse conditions which the motorist faces and demonstration of the best methods of driving under each condition. (Sr. High through Adult)

Parking the Car

8 minutes—sound $1.20 2

Techniques which facilitate parking a car—a problem for many beginning drivers. (Sr. High through Adult)

Pedestrians

10 minutes—sound $1.20 2

The driver's obligation to understand how to cope with many situations involving pedestrians. (Sr. High through Adult)

DUTCH TRADITION (OWI)

27 minutes—sound $1.20 2

This comprehensive documentary film shows the people of Holland and the Netherlands, East and West Indies; their background in time of peace and their contribution to our common fight against the Axis; presents the life, customs, resources, and industries of these people. (Jr. High through Adult)

Unit Value

DUTIES OF A SECRETARY (NEF)

30 minutes—sound $1.80 3

Barbara Hayes, a recent school graduate, starts in her first job. By following her, in a realistic plot, through her first day at work, the camera reveals good and bad office procedure.Her final, successful adjustment to her position creates the desired attitude, and sets a standard for secretarial efficiency and performance. The film points up dress, office security, business confidence, dictation, etiquette, mail handling, filing procedure, carelessness, calendar control, office appearance, telephone technique, tact, and initiative. (Sr. High and College)

EARLIEST NUMBERS, THE (Ind. U.)

27 minutes—sound $4.80 8

Shows man's first efforts to count with symbols and the contribution of these efforts to our present number system. Stresses this contribution in terms of the essential elements of modern numeration system: base, place, symbols, zero, decimal point. Through models, demonstrates and explains certain physical methods of writing and reckoning with numbers. (College, Adult)

EARLY SETTLERS OF NEW ENGLAND (EBF)

10 minutes—sound $1.80 3

Re-enacts the lot of Salem's hardy pioneers about 1626. Types of people; the proximity of their bark wigwams and dugouts to the seashore; their direct dependence upon the sea and the land for food; the need for mutual assistance; division of labor; care of the sick; problems of crop cultivation; relationships with England; and the background beginnings of American democracy are portrayed. (Jr. and Sr. High)

EARLY SOCIAL BEHAVIOR (EBF)

10 minutes—sound $1.80 3

In this picture the observer sees the manifestations of infant personality in a variety of special settings. Ten different children from eight weeks to seven years of age are studied. Individual differences are emphasized. The social significance of the household is conveyed by scenes which reflect parent-child relationships and interaction between brothers, sisters, and adults. (Sr. High through Adult)

EARNING MONEY WHILE GOING TO SCHOOL (CORONET)

10 minutes—sound $1.80 3

The question of doing part-time work while in school is a common one and this film serves as a guide for students considering outside employment. It shows that work after school can be undertaken if it doesn't interfere with school work and recreation. In addition to providing extra money, part-time work is valuable in many other ways; increasing responsibilities, understanding the relation between job work and school work, learning new skills and learning to get along with people. (Jr. and Sr. High)

EARS AND HEARING (EBF)

10 minutes—sound $1.80 3

Describes the physiology of the human ear by means of graphic animated drawings and remarkable close-up photography of the ear as it is functioning. Portrays accurately how the parts of the

Unit Value

ear operate, and records some of the important kinds of sounds in our environment. Explains three common causes of impaired hearing and demonstrates how a hearing aid is used. (Jr. High through Adult)

EARTH AND ITS SEASONS (KB)

10 minutes—sound $1.80 3
Explains clearly why we have changes of seasons, vernal and autumnal equinoxes, summer and winter solstices. (Elementary through Sr. High)

EARTH IN MOTION (EBF)

10 minutes—sound $1.80 3
This technical film presents the dynamic aspects of the earth as a planet. The earth's sphericity is demonstrated, while rotation is established by star trails and the Foucault pendulum. Proof of the earth's revolution about the sun in respect to stars and by the annual parallax of stars. Concludes with phenomena associated with this revolution, such as, characteristics of orbit, aphelion and perihelion, law of areas, inclination of axis, and seasons. (Jr. High through College)

EARTH MOVERS (OWI)

30 minutes—sound $1.20 2
How the heavy bulldozers and tanks helped in the war by moving earth for air strips, roads, etc. (Jr. High through Adult)

EARTHWORM, THE (UWF)

10 minutes—sound $1.80 3
Detailed biology study showing the worm in natural habitat, then cross-section, using photomicrographs with superimposed diagrams. (Sr. High and College)

EAT FOR HEALTH (EBF)

11 minutes—sound—color $3.00 5
This film introduces a new approach in teaching children to eat a well balanced diet. Using the five fingers of the hand as an always available checkoff device, the film identifies a food group with each finger. These food groups are: bread and butter or margerine; milk and cheese; meat and eggs; vegetables; and fruits. The film shows how Ralph Waller, using this system, learns to eat a balanced diet and has more fun as a result of his better health. Handled in a light and interesting manner, the film is both informative and motivational. (Hygiene)

EFFECTIVE CRITICISM (CORONET)

10 minutes—sound $1.80 3
Criticism and the application of this criticism is one of our most effective methods of learning. This film is chiefly concerned with the skills of *taking* criticism well, but it also shows how similar are the skills of *giving* criticism. Types of criticism and the difference between evaluating criticism and instructive criticism are outlined as a guide towards helping to make things better and to understand the relative value of things we have. (Jr. and Sr. High)

EGGS (EBF)

11 minutes—sound $1.80 3

Unit Value

Tells the story of egg production on a large commercial egg farm and illustrates the use of technological methods in modern, large scale egg farming. (Primary through Jr. High)

EGYPT AND THE NILE (EBF)

16 minutes—sound—color $2.40 4
This film shows one of the most interesting areas on the vast continent of Africa—the valley of the river Nile, one of the major rivers of the world with a consistent flow northward. This is a complete study of the geography of the area, as well as the social and cultural development of the people, who practice primitive farming on the banks of the river. (Elementary and Jr. High)

EGYPT'S HOLLYWOOD (HWO)

9½ minutes—sound $1.20 2
Eight major movie studios are now located in Cairo, film capital of the Middle East, and you'll see actual "on location" shots being filmed. Film production has skyrocketed here in recent years until it is now a leading industry. (Jr. High through Adult)

ELECTROCHEMISTRY (EBF)

10 minutes—sound $1.80 3
Portrays the electrolytic decomposition of hydrogen chloride and the production of electric current from the action of chlorine and hydrogen on platinum. An explanation of the storage battery integrates both processes. Electroplating illustrates participation of electrodes; electrorefining illustrates preferential discharge; and eletrolysis of sodium chloride to yield caustic soda illustarates participation of the solvent. The production of aluminum from a molten electrolyte concludes the subject. (Jr. High through College)

ELECTRODYNAMICS (EBF)

10 minutes—sound $1.80 3
Direct photography demonstrates cause and effect, while animation explains the fundamental principles of current electricity and electromagnetism. Galvani's discovery of current electricity; magnetic field about a current carrying wire; magnetic field of a coil; electro-magnets; Rowland's experiment; magnetic hypothesis; recalescence; induction by a magnet; A. C. generator; D. C. generator; induction by an electric current; and transformers are concepts presented. (Jr. High through College)

ELECTRONS (EBF)

10 minutes—sound $1.80 3
By means of various photographic techniques, including animation, the hypothesis that electricity consists of unit elementary charges is supported by observation of phenomena associated with the conduction of electricity in liquids, gases, and vacuums. Conclusion: that the fundamental unit of an electrical charge is the electron. (Jr. High through College)

ELECTROSTATICS (EBF)

10 minutes—sound $1.80 3
This deals with static electricity as fundmental to an understanding of the modern theories of electricity. It expains how positive and negative electrification are produced and by animated

Unit Value

drawings shows the part played by insulators and conductors. Explanation of the movement of charges in the electroscope, the Compton electrometer, the static machine and Nature's display of static electricity, lightning. (Jr. High through College)

ELEMENTARY SCHOOL (VaStDeptofEdu)

23 minutes—sound $3.00 5
A film for teacher education and public relations. Shows facilities and activities in numerous Virginia elementary schools. Illustrates good physical environment, provisions for health, safety, and for handicapped children. Emphasizes the importance of cooperation between parents and teachers. (College and adult study groups)

ELEMENTS OF COMPOSITION (Ind. U.)

27 minutes—sound $4.80 8
Defines and explains melody, harmony, rhythm, and counterpoint to a young audience. Each element is illustrated by the New York Woodwind Quintet. Emphasizes that melody is full of character, the addition of harmony makes music complete, rhythm is of many kinds and can be felt, and listening to counterpoint is like followng conversation. Summarizes and contrasts the elements of composition through the playing of a harmonic, rhythmic, and contrapuntal treatment of the melody, Pop Goes the Weasel. Music includes the folk melody, Watermelon Song; Guion, Harmonica Player; Telemann, Duet (performed by two young students); Wilder, Fugue, from Quintette for Woodwinds, and excerpts from Dvorak, New World Symphony and Villa-Lobos, Quintette (en forme de Choros).

ELEMENTS OF DESIGN: COMPOSITION (YA)

11 minutes—sound $1.80 3
Discusses composition as one of the basic elements of design, and its function in the art and industry of everyday life. (Jr. High through Adult)

ELEMENTS OF DESIGN: LIGHT AND SHADE (YA)

11 minutes—sound $1.80 3
Discusses light and shade as one of the basic elements of design, and its function in the art and industry of everyday life. (Jr. High through Adult)

ELEMENTS OF DESIGN: LINE (YA)

11 minutes—sound $1.80 3
Discusses line as one of the basic elements of design, and its function in the art and industry of everyday life. Shows the effects achieved by use of straight lines, curved lines, S-shaped lines, circles and their various combinations. (Jr. High through Adult)

ELEMENTS OF DESIGN: SHAPE (YA)

11 minutes—sound $1.80 3
Discusses shape as one of the basic elements of design, and its function in the art and industry of everyday life. Shows the effects achieved by use of circles, squares, rectangles, triangles, and their various combinations. (Jr. High through Adult)

ELEMENTS OF ELECTRICAL CIRCUITS (EBF)

12 minutes—sound $1.80 3

Unit Value

Consists of seven sequences: A—circuits in the home, B—conduction of electrons, C—resistance in a simple circuit, D—current flow in simple circuit, E—electromotive force, F—Ohm's law and its application, G—short circuit and conclusion. (Sr. High through College)

ELEPHANTS (EBF)

11 minutes—sound $1.80 3

Attention is given to elephants' physical features, food, methods of eating, drinking and cleaning themselves. An elephant is put through a series of tests for a circus buyer who engages the trainer to condition two young elephants. They learn to stand on their front and hind feet, sit on barrels, walk a plank, ring a bell, and obey other commands. (Primary through Jr. High)

ELI WHITNEY INVENTS THE COTTON GIN (YA)

27½ minutes—sound $3.00 5

From his desk Walter Cronkite sets the date at May 27, 1793, reporting a rumor that a machine has been invented which will separate the green seeds from cotton. A group of plantation owners in Savannah are saying they cannot buy slaves because of the poor crop situation. At Mulberry Grove, Eli Whitney admits that he has invented a gin. The film reports Whitney's difficulties in getting a patent after his plans were stolen. The vast importance of the cotton gin are pointed out. (Jr. High through Adult)

EMANCIPATION PROCLAMATION, THE (YA)

27 minutes—sound $3.00 5

January 1, 1863, the soul-searching hours of President Lincoln preceding his decision to free the slaves. Helps to point up both the moral and historical significance of one of the great events in America's history. (Jr. High through Adult)

ENCHANTED RIVER, THE (CORONET)

10 minutes—sound—color $3.60 6

Simon the honest woodsman had his choice of a silver axe or a golden axe. He chose neither, and asked only for his own plain axe. This simple story, acted against idyllic settings, becomes an entrancing human tale whose message will impress audiences of all ages. (Kindergarten, *Primary*, Intermediate)

ENDOCRINE GLANDS (EBF)

11 minutes—sound $1.80 3

Shows the nature and function of the parathyroid, pituitary, pancreas and thyroid glands. Gives the influence of calcium and parathyroid extract on muscular control, the effect of pituitary hormones on egg development, the preparation and use of insulin in the treatment of diabetes, the characteristics of hyper and hypothyroidism, and the stimulation of the mammary gland by pituitary and ovarian hormones. (Sr. High through Adult)

ENERGY AND ITS TRANSFORMATIONS (EBF)

10 minutes—sound $1.80 3

Potential kinetic and radiant energy, as manifested in mechanical, chemical, and thermal form, are vividly illustrated and explained. The principle of conservation of energy, and the concepts "power" and "work" are demonstrated in experiments. The

Unit Value

film closes with a review of present and future sources of energy. (Jr. High through College)

ENGLAND: BACKGROUND OF LITERATURE (CORONET)

10 minutes—sound $1.80 3

Works of Shakespeare, Dickens, Kipling, Conrad and other immortal English poets, novelists and dramatists are presented in this motion picture in terms of the settings that inspired them. The three main areas which their works reflect—London, the English countryside and the sea—are carefully portrayed so they are in keeping with the mood and feeling of the writings themselves. Used for background study, this film helps students understand and appreciate the literature that reflects English life. (Jr. and Sr. High)

ENGLISH CHILDREN (EBF)

10 minutes—sound $1.80 3

Delightfully portrays typical English family life in the city of York, stressing daily activities of the children. Points out interesting aspects of English home life and presents authentic events in a modern school, on the playground, at a cricket match, and at a grocery store. Concludes with a happy family holiday trip by train to a nearby seaside resort. (Primary and Elementary)

ENGLISH INFLUENCES IN THE UNITED STATES (CORONET)

10 minutes—sound $1.80 3

Our American heritage is the gift of many people, but among the strongest influences that have molded our way of life are those that have come from England. This film traces some of the basic influences of the England culture on our own: the idea of democratic action, the body of law; freedom of speech and press, religious tolerance, language and literature, art forms and styles. (Jr. and Sr. High)

ENGLISH HISTORY: EARLIEST TIMES TO 1066 (CORONET)

10 minutes—sound $1.80 3

Discusses the building of Anglo-Saxon England, emphasizing the many different peoples and cultures which were its ingredients. Authentic landmarks and historical materials from 1900 B.C. to 1000 A.D. are blended with brief reenactments of important historical events to give a compressed, yet vivid, panorama of the island of Britain and the assimilative process which was the making of the English nation. (*Junior High*, Senior High, College.)

ENGLISH HISTORY: NORMAN CONQUEST TO THE FIFTEENTH CENTURY (CORONET)

10 minutes—sound $1.80 3

An overview of medieval England from the Conquest in 1066 to the decline of feudalism, this film discusses the concept of limited monarchy as the basis of the England form of democracy. We see some of the many milestones, such as trial by jury and the Magna Charta, that marked the recognition and growth of human rights in Britain. (*Junior High*, Senior High, College)

ENGLISH HISTORY: TUDOR PERIOD (CORONET)

10 minutes—sound $1.80 3

Unit Value

Covering the period from 1485 to 1603, this film treats the growth of the national state under Henry VII and Henry VIII, with particular emphasis on the reign of Queen Elizabeth and the rise of Tudor England as a leading world power. The film concludes with the flowering of English culture at the height of the Elizabethan period and its successful transplanting in America. (*Junior High,* Senior High, College)

ESKIMO CHILDREN (EBF)

11 minutes—sound $1.80 3

Activities of an Eskimo family living on Nunivak Island, off the Alaskan coast. How the Eskimos solve the problems of obtaining food, shelter, and clothing is shown, as well as the tasks of parents and children, their handicraft arts, their recreations, family and community relationships, traditional manners and customs, and the changes resulting from recent outside influence. (Primary through Jr. High)

EVERYDAY COURTESY (CORONET)

10 minutes—sound $1.80 3

Those courteous habits of thought and action which should be used every day are taught by this motion picture. Its theme is that there are certain "skills" involved in courtesy and that the use of these skills allow one to move through many different social situations with a minimum amount of friction and a maximum number of friends. (Elementary and Jr. High)

EVERYMAN'S EMPIRE (USDA)

20 minutes—sound—color $1.20 2

This film deals with the conservation of our natural resources especially in regard to forests and wild life as a part of "everyman's empire". The valuable contribution made by our national forests to the conservation program is colorfully revealed. (Jr. High through Adult)

EVOLUTION OF THE OIL INDUSTRY (BM)

34 minutes—sound $1.20 2

Tells a comprehensive story of the petroleum industry, starting with scenes depicting Biblical episodes in which petroleum pitch or bitumen may have been an important material. The story moves rapidly to the Western Hemisphere with scenes of American Indians and later, white men finding beneficial uses for rock oil. As the film proceeds, the Drake well near Titusville, Penn. becomes an actuality and the historical characters of that period are seen in action with the tools they devised. Following this historical pageantry, oil well drilling is followed across prairies invading cities and reaching to the waters of the Pacific Ocean. (Elementary through Adult)

EXERCISE AND HEALTH (CORONET)

10 minutes—sound $1.80 3

There is much more to exercise than just building muscles. Ernie was in a run-down condition and sick too often. Jean slouched through life, was awkward and too shy. Hal was "All work and no play" and much too irritable. Yet exercise and participation in athletics helped each of them to overcome a particular difficulty. After enjoying this film story students will know that the right

Unit Value

kind of exercise will go a long way toward making them heathier and happier. (Jr. and Sr. High)

EXERCISE FOR HAPPY LIVING (EBF)

11 minutes—sound $1.80 3

Effectively dramatizes the role of exercise in building a strong body and healthy, happy personality. Depicts a boy's keen disappointment at being only a "substitute" on the neighborhood ball team. Portrays his negative attitude toward exercise both in his school gym class and in performing simple tasks around the house. Reveals by means of a dream sequence in animation the healthy effects of exercise upon muscles and thus stimulates in the body an eagerness to acquire good health habits in exercise. (Primary and Elementary)

EXPERIMENTAL STUDIES IN SOCIAL CLIMATES OF GROUPS (IowaStU)

30 minutes—sound $2.40 4

Shows behavior of groups of boys organized in clubs run on democratic principles, as an autocracy and as a laissez-faire group. Shows responses when groups are changed from one type to another. Graphs and charts give statistics as to group action and reactions. (College and Adult)

EXPLORING TALENT AT INTERLOCHEN (NMC)

30 minutes—sound—color $1.20 2

A beautiful color film of the activities at the National Music Camp at Interlochen. We follow the children through their exciting experiences at the camp. The children make their own reed instruments and enjoy regular camp activities along with their music. (Elementary through Adult)

EXPLORING THE NIGHT SKY (EBF)

10 minutes—sound $1.80 3

This film takes us to the dome of an observatory which is turned and opened so that the camera can concentrate on one section of the sky at a time. The great telescope is shown in close-ups; then the shutter of the dome is opened and a magnificent view of the night sky is revealed through the lens. Stars are recognized by their size, their color and their brightness. (Elementary, Junior High)

EXPLORING THE UNIVERSE (EBF)

10 minutes—sound $1.80 3

Demonstrates the principles and construction of telescopes. Shows by animation the binaries, trinaries, the variables and why they vary, galaxies and galactic rotation. Shows also what will happen to the Big Dipper in 100,000 years and the theory of the expanding universe. (Jr. High through College)

EYES AND THEIR CARE (EBF)

10 minutes—sound $1.80 3

Emphasizes the importance of good vision and explains the structure of the eyes and their care. (Jr. High through Adult)

EYES FOR TOMORROW (NSPB)

22 minutes—sound $1.20 2

Unit Value

Stresses good general health as a prerequisite for good eyesight. It also deals with the importance of prenatal care as a means of reducing the amount of blindness caused by syphilis and gonorrhea; the conservation of vision among school children; the use of sight-seeing classes for children with seriously defective vision; the necessity for regular eye examinations; methods of treating glaucoma and trachoma; and the eye hazards of industry. (Jr. High through Adult)

FACE OF THE EARTH (EBF)

12 minutes—sound—color $3.60 6

Dramatically reveals the "wearing down" forces on earth in the action of glaciers, frost, landslides, and running water. In contrast are the "building up" forces demonstrated by volcanic lava and buried sea shell fossils in the rock layers. Portrays the Painted Desert, the Petrified Forest, the Grand Canyon, Zion and Bryce Canyons as illustrations of spectacular geologic formations resulting from the unceasing war between the forces of nature. (Jr. High through College)

FAMILY LIFE (CORONET)

10 minutes—sound $1.80 3

"Gee, how do they do it? There go the Millers again, off for another day at Crystal Lake!" Once disorganized and hard pressed, we see how through proper home management of schedules, responsibilities, privileges, and finances, they begin to enjoy life as they should. This film creates an awareness of the happiness to be gained from a well-managed home, and outlines a program for achieving it. Church, school and community groups will find this motion picture especially valuable for youth-adult meetings and group counseling. (Jr. and Sr. High)

FAMILY OUTING (NFB)

20 minutes—sound—color $1.20 2

A family camping trip in the Banff National Park. Illustrates provision made for those who wish to pitch a tent and live outdoors in preference to hotel or tourist accommodations. The convenience of the public tourist camps are noted as well as the recreational advantages of the surroundings. Along the superb motor roads leading into the parklands of the Rockies a family car is seen approaching the entrance to the Banff National Park where the family sets up a tent and enjoys a wonderful mountain holiday. We see much of the wild life of the park, trout streams to lure the anglers, backdrops of white capped peaks, the dark green of the vegetation, the sparkle of clear water, which seem ample reward for the small chores of life in the open. (Elementary through Adult)

FAMOUS FISH I HAVE MET (NFB)

10 minutes—sound—color $1.20 2

Greg Clark and Pete McGillen, popular Canadian outdoor columnists tangle over the pleasures of fishing. Greg is delighted and amazed by the fishing displays at the Canadian national sportsmen's show. Pete favors hunting. It takes a lot of fishing to convince the hunter, but the fish are there and Greg claims a convert. The film shows musky and pike drawn from northern lakes, small mouth bass, speckled trout caught against a background of Rocky

Unit Value

Mountains, coho salmon, Atlantic salmon and tuna. (Elementary through Adult)

FAR WESTERN STATES (EBF)

10 minutes—sound $1.80 3

Describes the economy of the states of Washington, Oregon, California and Nevada, including a brief historical resume of progress made in the use of resources in this great region. Sectional contrasts, with respects to climate, topography, people, and population densities, are shown. Mining, lumbering and agricultural activities are portrayed. (Elementary through Sr. High)

FARM ANIMALS (EBF)

11 minutes—sound $1.80 3

Follows a farmer through a typical day of caring for his animals. Farm scenes include: a newborn calf and colt, young pigs and lambs nursing, a goat and kids frolicking, and the shearing of sheep. Natural sounds are provided. (Primary through Jr. High)

FARM GARDEN, THE (C)

19 minutes—sound—color $1.80 3

Gives an over-all picture of planning and working a garden from March through October—deciding upon vegetables to plant, laying out the garden to take care of early and late crops, preparing the soil, planting at the proper time, the continuous fight against weeds and pests, and finally harvesting the fruits of labor. (Elementary through Adult)

FEDERAL GOVERNMENT: THE PLAN OF ORGANIZATION (CORONET)

13 minutes—sound $2.40 3

Structure and functions of the Federal Government are presented here in a manner designed to give audiences a clear-cut picture and appreciation of its operation. Outlined are the primary divisions of responsibility in government; the reasons for this division and the problems that arise from the many quasi-legislative and quasi-judical boards and agencies. The importance of understanding these things for maintenance of good efficient, responsive government is stressed throughout the film discussion. (Jr. and Sr. High)

FEDERAL RESERVE SYSTEM (StDeptPubInstr)

15 minutes—sound $1.20 2

Graphically explains the purpose and functions of the Federal Reserve System. Shows how the System, growing naturally out of a national need, was devised to meet certain economic conditions. Covers the period from the money panic of 1907 through World War II, emphasizing historical highspots in the System's development as well as important contributions made by several national leaders. (Jr. and Sr. High)

FEDERAL TAXATION (CORONET)

10 minutes—sound $1.80 3

Documenting our entire system of federal taxation, this film lucidly outlines personal and corporation income taxes, excise taxes and taxes on luxuries and special services . . . graphically

Unit Value

relating each to the basic questions of 1) How we pay taxes? 2) Why do we pay taxes and 3) What do we get for our tax money? (Jr. and Sr. High)

FEEDING FARM ANIMALS (USDA)

19 minutes—sound $1.20 2

Shows the basic principles of feeding farm animals. An experienced farmer gives advice to his neighbor, a young farmer, on what and how he should feed his stock. The "how" and "why" of proteins, carbohydrates, fats, vitamins, minerals and water are graphically illustrated. This film is a lesson in nutrition and of direct value to farmers. (Primary through Sr. High)

FELTBOARD IN TEACHING (WayneU)

9 minutes—sound—color $3.00 5

Suggests use which the classroom teacher may make of the felt-board—also known as the visual board, feltogram, flannelgraph. (Adult)

FIELD TRIP (VaEduDept)

10 minutes—sound—color $2.40 4

Instructions on how to plan and make a field trip using a trip to Dismal Swamp as an example. Made for parents and teachers with the cooperation of the Norfolk County School Board. (College and Adult)

FIELD TRIP TO A FISH HATCHERY (CORONET)

10 minutes—sound $1.80 3

A class takes a film trip to a fish hatchery and they discover the answer to the following questions: "Why do we have fish hatcheries? What do they look like? What happens there? How do fish live? In this interesting film, you will see fish eggs taken from the female, fertilized, hatched and developed from fry into fingerlings. Important details about the structure of fish and how fish are planted in the streams and lakes are also included. An excellent study in field-trip techniques, conservation, biological science and reading background. (Elementary and Jr. High)

FIESTAS OF THE HILLS (OIAA)

10 minutes—sound $1.80 3

A colorful pictorial record of the religious fiesta of the Via Crusis in Mexico. Also shown is the pilgrimage to Chalma. Symbolic dances and elaborate processions add to the interest of the film. (Jr. High through Adult)

FILM RESEARCH AND LEARNING (U. of Wisconsin)

14 minutes—sound—black and white $1.20 2

Effectively shows the need for vicarious learner experiences in learning to read. Establishes the merit of a readiness program, showing the value of films through reports made of research projects. Provides the teacher with an answer to the question, "Of what value are motion pictures in teaching?" (Adult)

FINAL PERFORMANCE OF SARAH BERNHARDT, THE (YA)

27 minutes $3.00 5

November 30, 1922, one of the world's greatest actresses defies

Unit Value

the approach of death to go on the stage once more, so that she may say goodby to the public which has adored her. A high point in the history of the American theatre. (Jnuior High through Adult)

FIND THE INFORMATION (CORONET)

10 minutes—sound $1.80 3

Your students will learn how to find information quickly through this study of many widely used indexes. With Al and Bob, who are preparing an index on atomic energy, they will learn how to use the library card file and such general reference sources as The Reader's Guide to Periodical Literature, Who's Who in America, and The World Almanac . . . each an invaluable aid in efforts to Find the Information. (Jr. and Sr. High)

FINDING YOUR LIFE WORK (M)

20 minutes—sound $3.00 5

Opening with an attractive picture of a boy fishing, this film quickly leads up to the fact that experienced fishermen are particular about their baits. In getting a job, the baits required are personality, training and experience. These points are then discussed: your strong points, weaknesses, likes and dislikes, intelligence and accomplishments, hobbies, determination, economic assets, and what you really want to do. A fine film. (Jr. High through College)

FINGER-PAINTING METHODS (CORONET)

8 minutes—color $1.80 3

This film offers kindergarten and primary grade teachers many practical suggestions for organizing and administering a finger painting class. The various styles and techniques used by the children in the film—plus their exciting results—will fascinate your class and encourage them to try this artwork themselves. (*Teacher* Education, Kindergarten)

FINGERS THAT SEE (NC STATE SCHOOL FOR BLIND)

20 minutes—sound—color $1.20 2

The story of the North Carolina State School for the Blind at Raleigh, N. C., showing the training and activities of the students there. (All age groups)

FIRE (EBF)

10 minutes—sound $1.80 3

Describes domestic uses of fire, principles of combustion, nature of fire hazards, and principles of fire-extinguishing. Indicates fire is useful for waste disposal, production of heat for cooking, warmth and light. Explains combustion, regulation of gas and air in a stove, regulation of draft in a coal furnace. Dramatizes home fire hazards, methods for extinguishing fire, and why fire ceases to burn. (Elementary through College)

FIRE PREVENTION IN THE HOME (EBF)

13 minutes—sound $1.80 3

Employs an interesting story treatment to make youngsters aware of important aspects of fire prevention in the home. Demonstrates proper use of matches and of a home-type fire extinguisher. Illustrates careful investigation of electric outlets and of making

Unit Value

fire prevention a family matter in which youngsters and parents cooperate. (Primary and Elementary)

FIRE WEATHER (USWB)

20 minutes—sound $1.20 2
Shows methods of fire protection, devices for assembling and evaluating weather reports, maps made daily by the forest protection service and the fire weather trucks. (Jr. High through Adult)

FIREMAN (EBF)

11 minutes—sound $1.80 3
The organization and activities of a company of firemen in a modern city. A real fire affords an opportunity to observe the firemen answering the alarm and extinguishing the blaze with the latest type of fire-fighting apparatus. (Primary through Sr. High)

FIRST AID ON THE SPOT (EBF)

10 minutes—sound $1.80 3
Features six common types of injuries or disabilities and the approved first-aid technique. Demonstrates the approved American Red Cross technique for handling each specified case. The film provides demonstrations for caring of wounds, burns, and shock; of splinting, controlling bleeding; and of administering artificial respiration. (Jr. High through Adult)

FIRST AID—Wounds and Fractures (EBF)

10 minutes—sound $1.80 3
Illustrates proper ways of determining the nature and extent of injuries, summoning medical help, preventing hemorrhage, applying splints, and avoiding shock. (Jr. High through Adult)

FISHERMAN'S BOY, THE (CORONET)

10 minutes—color $3.60 6
Danny's father is captain of a commercial fishing boat, the "Oliver Smith," yet Danny has never been fishing on it. When can he go? When he is a real fisherman, his father tells him, so he can do the work a fisherman has to do on the "Oliver Smith." Danny decides to learn about fishing and with the help of Mr. Brown, who has fished for many years, Danny does learn to fish with a pole from the dock and so earns the right to go out.

FIVE COLORFUL BIRDS (CORONET)

10 minutes—sound—color $3.00 5
In their natural habitats, five of America's most colorful birds—the goldfinch, cedar waxwing, yellow-headed blackbird, red-headed woodpecker and bluebird have been photographed feeding, nesting, and rearing their young. Kodachrome effectively contrasts the dull garb of the female bird with the brilliant plumage of the male. (Elementary and Jr. High)

FLATBOATMEN OF THE FRONTIER (EBF)

10 minutes—sound $1.80 3
Reveals how the early settlers of the Ohio Valley were required to be Farmer Boatmen through their dependence on the soil for livelihood and on the rivers for transportation. Good frontier per-

Unit Value

sonalities, speech and music are interwoven throughout. (Elementary through Sr. High)

FLIPPER, THE SEAL (CORONET)

10 minutes—color $3.60 6

A group of children at the zoo watch Flipper go through his antics, and one boy eagerly decides to learn more about seals. As a language builder this charming film fuses the seal's actions with such words as *waves, swimming, dive* and *fur*. Here is an exciting shared experience as a subject for class discussion, reading and other means of developing the ability for expression in youngsters. (Primary, Intermediate)

FLOOD WEATHER (USWB)

30 minutes—sound $1.20 2

Complete study of the ways of determining the weather, and recording and forecasting the flood stages of rivers. Scenes depict the flood waters of the Potomac in 1936 and those of the Ohio Valley in 1937. (Jr. High through Adult)

FLOW OF ELECTRICITY (YA)

10 minutes—sound $1.80 3

This film explains the factors which affect the flow of electricity through a simple electrical circuit, introduces the electron theory and shows the application of a simple circuit in a home situation. The film is built round the inquiries of Betty and Bob. (Elementary and Jr. High)

FLOWERS AT WORK (EBF)

11 minutes—sound $1.80 3

The parts and the physiology of plant flowers are artistically presented by animation. Time-lapse photography interspersed with animation then presents various types of flowers and different methods of pollination. Relation of insects to cross-fertilization of flowers is clearly illustrated. (Elementary through Adult)

FLYING A KITE (EBF)

7 minutes—sound—color $1.80 3

This delightful little film does not give guidance for kite-flying, but it does motivate reading for children in the primary grades. By means of a simple story of happy home and family relations and childhood activities, the child's interest is immediately captured by the familiar, humorous situations: a family picnic, a kite, a pesky old billy goat, and frisky dog who turns out to be a hero.

FOOD STORE (EBF)

11 minutes—sound $1.80 3

Jack and Ann help their mother with the Saturday marketing in the local self-service store. They see that different wholesalers supply the local store with dairy products, baked goods, and prepared packaged food. The children and other customers line up at the cashier's counter and then they load the groceries in Jack's wagon to carry them home. (Primary through Jr. High)

FORWARD A CENTURY (BIS)

28 minutes—sound $3.00 5

Unit Value

Presents a contrasted picture of industrial and social life in Britain in terms of the Exhibitions of 1851 and 1951.

FOODS AND NUTRITION (EBF)

11 minutes—sound $1.80 3

Animated treatment protrays normal dietary requirements of carbohydrates, fats, proteins, minerals, vitamins and water, (Sr. High through Adult)

FOOTBALL FOR MILLIONS (OSFS)

25 minutes—sound $2.00

This film is produced primarily for instructing players and officials and to give the fans a knowledge of the football rules. The picture would be fine for assembly programs, civic clubs and instruction for the football squad.

FOOTBALL TODAY (OSFS)

30 minutes—sound ..... per day $2.00

Play situations illustrating football rules. The kick-off followed by: violations of the snap—delay of the game—rights of the kicker and receiver on punt formation—methods of substitution—types of fumbles, passes and handed ball—protection for passer and kicker. Scenes are frozen, suspending action permitting audience to follow official's decision. (Jr. High through Adult)

FOR HEALTH AND HAPPINESS (C)

10 minutes—sound—color $1.80 3

Shows the importance of good food and exercise in building strong, healthy bodies, and correct development of the body from babyhood to adulthood, with suggested diets and physical activities. (Jr. High through Adult)

FOR SOME MUST WATCH (AM. LIFE INS.)

30 minutes—sound $1.20 2

An absorbing documentary film that tells the dramatic, behind-the-scene stories of the people in a typical American community—the problems that face the community and those who live there. Told and acted by the townspeople themselves. Every incident is true, recorded as it happened. (Sr. High through Adult)

FOR US THE LIVING (Prop.-Assoc.)

18 minutes—sound—color $1.20 2

The intent and purpose of the picture is to assist viewers in realizing how industry and government cooperate to make American drugs and medicines the purest, safest and most effective in the world. (Jr. High through Adult)

FORCE AND MOTION (CORONET)

10 minutes—sound $1.80 3

Here we see how a boy's curiosity leads him to investigation and comprehension of force, mass, acceleration, and their interrelationships. The film also portrays visually the effects of the basic laws of mechanics and Newton's Three Laws of Motion, and introduces the student to such terms as inertia, momentum and reaction. (Jr. and Sr. High)

Unit Value

FORCE OF GRAVITY (YA)

10 minutes—sound $1.80 3
Explains the theory of gravity and its observable effects. (Elementary)

FOREST CONSERVATION (EBF)

10 minutes—sound $1.80 3
Strikingly calls attention to the many ways in which man has depleted the forest by greedy and ignorant exploitation for his own gain. Graphically forecasts the dire results of this exploitation if it is continued. Suggests finally what is being done, and must continue to be done, in order to save the forest and its vast resources. (Jr. and Sr. High)

FOREST RANGER (C)

33 minutes—sound $1.80 3
Explains the duties and services performed by forest rangers, and, being rich in natural scenic effects, lends itself readily to a variety of curricular applications. (Elementary through Adult)

FOREST TREASURES (VENEER)

25 minutes—sound $1.20 2
World wide search for rare woods and the story of their utilization in plywood and veneers from Egypt of the Pharaohs to England's luxury liner the "Queen Mary." (Elementary through Adult)

FOUR WAYS TO DRAMA (U. of Calif.)

33 minutes—sound $3.00 5
A short dramatic episode is presented in four versions: for stage, radio, television, and motion pictures. The requirements for each medium are pointed out. (High School through Adult)

FOX AND THE ROOSTER (EBF)

11 minutes—sound—black and white $1.80 3
This charming adaptation of one of Aesop's fables points up the moral that even a clever schemer can be outwitted when good friends help each other. Real animals play all the roles. (Primary and Elementary)

FRACTIONS (Ind. U.)

27 minutes—sound $4.80 8
Presents the history and some of the characteristics of fractions. Sketches the basic principles governing the use of fractions. Shows that a fraction has five meanings. Traces the way in which our present representation of fractions has come to us from Babylonia, Egypt, Greece, Rome, India and Belgium. Compares the properties of rational, decimal and duodecimal fractions. (College and Adult)

FRANCE: BACKGROUND FOR LITERATURE (CORONET)

10 minutes—sound $1.80 3
Students go to the France of Hugo, Balzac, de Maupassant, Dickens and Poe to see for themselves the places where their famous stories were set. Here the woods and emotions of France are captured and presented as an authentic background for discussion and special class projects. (Jr. and Sr. High)

Unit Value

FRANCE—Food for Paris Markets (UWF)

20 minutes—sound $3.00 5

How large cities depend upon productive rural hinterlands to supply them with food, is the lesson presented in this film. Paris, the "primate" city of France, is one of the largest four cities on the mainland of Europe. Fortunately it can be reached easily from all parts of the country. And equally fortunate, France has within its borders many areas of fertile land. Hence, France can feed the people of Paris and the rest of the country. It is one of the Western European countries which has achieved a large degree of self sufficiency in food supply. (Elementary through Adult)

FRANK AND HIS DOG (EBF)

7 minutes—sound—color $1.80 3

Happy home and family relations, familiar and exciting to children, form the basis of this film designed especially to motivate reading in the primary grades. It features the Saturday morning antics and pranks of Penny, the Baxter family dog, who gets into all kinds of mischief. But in spite of scoldings, Penny knows the Baxters love him.

FRANKLIN, BENJAMIN (EBF)

20 minutes—sound $2.40 4

Events in the life of the great American statesman, writer, scientist and diplomat, starting with an opening sequence on young Franklin sweeping out the printing office of his brother James to whom he was apprenticed, and leaving him at the age of eighty-one, giving his message to the Constitutional Convention on the day that the Constitution was signed—an honored man who contributed much to the work in his long and varied career. (Elementary through Adult)

FRANK TENDS THE GARDEN (EBF)

7 minutes—sound—color $1.80 3

This film presents a simple story involving familiar home and family relations familiar and interesting to children. It has been designed to serve as an incentive for reading among primary grade youngsters. It depicts the frolicking good time had by Frank, sister Jean, and their pets as they water the garden and take a shower under the hose. (Primary and Elementary)

FRED MEETS A BANK (CORONET)

10 minutes—sound $1.80 3

Fred's introduction to a bank gives the inside story on banking procedures. He learns about handling checks, opening savings accounts and securing loans. His tour behind the scenes takes us through the different departments—all the way from safety deposit rental through bookkeeping. (Elementary)

FREEDOM TO LEARN (NEA)

27 minutes—sound—color $1.20 2

This film shows that modern schools prepare our children to assume their responsibility as a good citizen. It explains that respect for fact, constant search for the truth, and knowledge of the world as it actually is are essential in this preparation.

Unit Value

FREEDOM TO READ (NEA)

14 minutes—sound $1.20 2

A member of a community group points out the danger of aiding Communism by having books in the public library which help their cause. The librarian argues that the books be retained in the library. She recalls the words of Jefferson and Voltaire and claims that it is in the democratic tradition that all points of view be considered. The issue is then put to the audience to decide. (Jr. High through Adult)

FREEZING FRUITS AND VEGETABLES (USDA)

15 minutes—sound—color $1.20 2

Shows how to prepare and package fruits and vegetables for freezing in home freezer or in commercial locker plant. Illustrates with step-by-step close-ups recommended methods for corn, broccoli, strawberries, and peaches. Demonstrates special home-made equipment for filling and sealing packages. Gives you the answer to such questions as: How long to scald vegetables, how to keep fruit from darkening, how to sweeten fruit, and how to seal different types of containers. (Sr. High through Adult)

FREMONT, JOHN C. (EBF)

20 minutes—sound $2.40 4

Dramatizes important and significant events in the rich, full life of John C. Fremont, cartographer, explorer, military general, presidential candidate, and territorial governor. Begins with Fremon't government work as explorer and map-maker in the Mississippi valley and the West. Calls attention to his association with Kit Carson, and his part in the Mexican and Civil Wars. Recalls his defeats for the Presidency and his eventual appointment as territorial governor of Arizona. (Jr. and Sr. High)

FRENCH CANADIAN CHILDREN (EBF)

11 minutes—sound $1.80 3

Describes the home, school and community life of children in a French-Canadian farm family. Old World influences affecting the speech, manners, and customs of these northern neighbors are striking. (Primary through Sr. High)

FRENCH CHILDREN (EBF)

10 minutes—sound $1.80 3

Provides an interesting and enjoyable visit with a farm family living in Brittany in Western France. Emphasizes family living, showing the work of each member of the family and revealing customs and traditions. Includes characteristic activities in the village school, and a trip to a neighboring town. Offers glimpses of the French countryside including an old castle. (Primary and Elementary)

FRENCH INFLUENCES IN NORTH AMERICA (CORONET)

10 minutes—sound $1.80 3

From the Gulf of the St. Lawrence to the mouth of the Mississippi, the great French Empire in North America left a profound influence upon the culture of this continent. The living evidences of that culture on our own language, dress, architecture, religion and art forms are the theme of this visual history motion picture.

Unit Value

Authentic historical locations from Quebec, Canada, to former forts and trading posts of the middle west down to the bayous of Louisiana, document the widespread movement and influence of French explorers. (Jr. and Sr. High)

FRENCH MOROCCO—Desert Nomads (UWF)

20 minutes—sound $3.00 5

This film presents the life of Nomads who are found in some dry-land regions of the world. We see tribes of nomads in the Sahara, south of the Atlas Mountains, wandering from place to place in search of grass for their animals, but always returning to the oasis to exchange their products for agricultural corps. These people, like all desert tribes, are dependent upon the camel for transportation. (Elementary through Adult)

FRICTION (YA)

11 minutes—sound $1.80 3

This film introduces the student to the nature of friction as a restraining force with which he must contend in everyday life. It explains the ways in which we try to reduce friction when it is undesirable, and the ways in which we try to increase it when it is helpful. (Elementary)

FRIENDSHIP BEGINS AT HOME (CORONET)

15 minutes—sound $2.40 4

During adolescence, we grow away from our families. While this process is natural and desirable, it is also difficult and disturbing. The film is directed to the adolescent, stating as vividly and as emphatically as possible the importance of valuing the friendships in the home—the fun of doing things with the family group. Designed for guidance programs, it is useful to home economics teachers and for general groups as well. (Jr. and Sr. High)

FRISKY, THE CALF (CORONET)

10 minutes—sound $1.80 3

The story of a lovable little calf, taking children into the barnyard where they see how the animal is handled. Designed to stimulate youthful interest in the world about them and to provide a background for reading and discussion. (Primary and Elementary)

FROG, THE (EBF)

10 minutes—sound $1.80 3

The entire life cycle of the frog is presented, aided by many stop-motion scenes and microscopic views. The development of the embryo is thus brought to the screen in a continuous scene of only a few seconds. The changes taking place in the tadpole stage are carefully portrayed. (Elementary through College)

FROM CREEPING TO WALKING (EBF)

10 minutes—sound $1.80 3

This film illustrating the correlation of abilities continues the study begun in POSTURE AND LOCOMOTION. (Sr. High through Adult)

FROM ONE CELL (AM. CANCER)

10 minutes—sound—color $1.20 2

Unit Value

Presents the subject of embryonic, regenerative, and degenerative cell behavior. Beginning with the fertilized egg-cell and proceeding through the various sequences rapidly review the phenomena of generative growth. Then moves on to regenerative growth in the repair and replacement of bodily tissue. Finally, the abonormal growth of cancer is presented. Designed for biology classes. Not recommended for use in general school assemblies. (Sr. High through Adult)

FROM TEE TO GREEN (NFB)

12 minutes—sound—color $1.20 2

A tour of fine Canadian golf courses, from Newfoundland to Vancouver Island. Setting out to hitch-hike across the country, a youngster earns his way by caddying at courses in each province: St. Georges, Toronto, Laval-sur-le-lac; near Montreal, Capilano, Vancouver and others, including the courses in such national parks as Prince Albert, Sask, Banff, Jasper-Alberta and Green Gables. (Jr. High through Adult)

FROM TOE TO TIP (GP)

10 minutes—sound $1.80 3

A specific film on posture for girls, written as an incentive subject. Bonnie, 14 dressed formally, starts from her home with her escort for a party. She is graceful and poised, and the film cuts back to show the attention she pays to posture. Bonnie, now in gymnasium dress, demonstrates correct posture in motion, reemphasizes it through diagrammed skills, and practices corrective exercises. It is explained that she does these exercises routinely. The posture exposition begins with the feet and includes knees, hips, stomach, chest, shoulders, and head, each pictured and discussed separately. Bonnie is treated as an average girl and where her own posture errs, this is brought out. (Jr. High through College)

FROM TREES TO LUMBER

14 minutes—sound—black and white $1.20 2

Follows the manufacture of lumber from seedling to sawlog and through the mill. Stresses need for sound forest management to guarantee future supply. (Elementary to Adult) (Natural Resources) (Social Studies)

FROM TREES TO PAPER (AM. FOREST PROD.)

13 minutes—sound $1.20 2

Shows by dramatic photography and simple diagram how paper is made from trees. It also tells how scientific forest management assures growth of repeated crops. (Elementary through Adult)

FRONTIERS OF FAITH (NAT. ACADEMY FOR ADULT JEWISH STUDIES)

27 minutes—sound $3.00 5

A historical portrayal of some of man's efforts to express his religious drives in the form of dance routines—some, highly symbolic, impressionistic, complex expressions; others, simple expressions of awe and faith. (Adult)

Unit Value

FRUITS, VEGETABLES, AND COOPERATION (USDA)

28 minutes—sound $1.20 2

Benefits of cooperative market-growing and co-operative marketing of celery, lettuce, potatoes, cherries, cranberries, mushrooms, peaches, apples and citrus fruits. (Jr. High through Adult)

FUELS AND HEAT (EBF)

11 minutes—sound $1.80 3

Explains the use of carbon in fuels, the manufacture and storage of carbohydrates by plants, the way coal and oil were produced by nature, and how man extracts them. The process of combustion is portrayed by animation. Describes molecular action in portraying the relation of heat to temperature. Steam and internal combustion engines are explained. (Jr. High through College)

FUN IN FOOD (GATEWAY)

10 minutes—sound—color $3.00 5

This film is dynamic presentation of the food constituents, their sources and their functions, calculated to impel one to think more in terms of the value of a balanced diet. For example, the common sources of calcium are shown, then a visual comparison is made between the value of calcium to our bones, the foundations of our bodies, and the value of foundations to buildings. Care has been taken to illustrate the material with foods in varying budget levels. (Primary through Jr. High)

FUN OF BEING THOUGHTFUL (CORONET)

10 minutes—sound $1.80 3

Behind courtesy, behind all social adjustment, lie the complex skills involved in insight into the motives, tastes and desires of others. We call this insight thoughtfulness and it is expressed in hundreds of small and large ways . . . in speech, silence, action and inaction. Thoughtfulness is shown here to be the intelligent exercise and application of a few social skills: noticing what others like and want—and acting accordingly. (Jr. and Sr. High)

FUN OF MAKING FRIENDS (CORONET)

10 minutes—sound $1.80 3

What are the values of friendships? How do you make friends? How do you keep friends? There are a few points about friendship that are dealt within this unique and helpful production. THE FUN OF MAKING FRIENDS helps teachers guide classes to a realization of what friends are and how easy it is to be friendly. (Elementary)

FUN THAT BUILDS GOOD HEALTH (CORONET)

10 minutes—sound $1.80 3

All children need to learn many different kinds of play—in groups or alone—at active physical activities or at quiet games and pastimes. By presenting a variety of choices of recreation in terms of good times and good health, this film will have a direct effect on the play activities of children. (Elementary)

FUNDAMENTAL OPERATIONS (Ind. U.)

27 minutes $4.80 8

Unit Value

Analyzes modular arithmetic as an aid in understanding the principles of our own, or rational, arithmetic. Through arithmetic modulo five shows the closure, commutative, and identity element principles of rational arithmetic. Identifies the additional associative and distributive arithmetic principles using our own arithmetic. Demonstrates that the two fundamental operations are addition and multiplication. (College and Adult)

FUNDAMENTALS OF ACOUSTICS (EBF)

10 minutes—sound $1.80 3

The phenomenon of hearing and the modification of sound between the source and the hearer are emphasized in this film. The specific elements explained or demonstrated are velocity of sound, refraction, range of hearing, lowering intensity, attenuation in air, eliminating high and low frequencies, reverberation and focusing of sound. (Jr. and Sr. High)

FUNDAMENTALS OF DIET (EBF)

10 minutes—sound $1.80 3

Outlines the types of animals with respect to their food habits and the classes of food which man has learned to eat. The uses of food in the human body are shown. Experiments with animals illustrate the results of a number of food deficiencies. (Jr. High through College)

FUNDAMENTALS OF TENNIS (YA)

20 minutes—sound $1.80 3

Famed tennis player Donald Budge illustrates and discusses the techniques of good tennis. Backhand, forehand and service strokes are carefully analyzed. Special attention is given to correct footwork. (Jr. High through College)

FUNDO IN CHILE (OIAA)

20 minutes—sound $1.20 2

A contrast of the new farming methods with the old on the large fundos (ranches) of Chile. Special emphasis is laid on the trends toward modernization. There are good sequences too, concerning the daily life of the fundo workers and their families. (Elementary through Adult)

FUNDY HOLIDAY (NFB)

10 minutes—sound—color $1.20 2

Newest of Canada's National Parks, on the Bay of Fundy in New Brunswick, provides eighty square miles of varied vacation pleasure. Through the eyes of vacationers we see the scenic panorama of the Park—shimmering seascapes, white beaches, a crimson sunrise, and dense forests harboring wild life. Enticing pastimes to suit every taste abound including the summer courses at the New Brunswick School of Arts & Crafts. (Elementary through Adult)

FUNGUS PLANT (EBF)

10 minutes—sound $1.80 3

Emphasis is given to the various mushrooms whose growth and reproduction are illustrated by time-lapse photography and animation. Molds and other fungi are also presented by these same

Unit Value

techniques. Their economic importance is indicated. (Elementary through College)

FUR TRAPPER OF THE NORTH (EBF)

10 minutes—sound—color $3.60 6

A vivid and authentic portrayal of the rugged life of the fur trapper in the northern wilds. Depicts his summer and early autumn preparations, and dramatically illustrates autumn and winter trapping activities. Follows through to the coming of spring with the break-up of the ice, and the end of the trapping season. (Elementary and Jr. High)

FURNITURE CRAFTSMAN (EBF)

11 minutes—sound $1.80 3

Describes the roles of the designer and skilled craftsmen in making custom-built furniture. Pattern making, laying out, band sawing, power planing, joining, lathe turning, grooving, gluing, carving, and finishing stages are studied in closeup detail. The interrelation of hand and machine-tool operations and skills required for precision wood-cutting are demonstrated. (Elementary through Jr. High)

FURY IN THE PACIFIC (OWI)

20 minutes—sound $1.20 2

This is the first film produced jointly by the armed forces for public showing, combining footage from the Army, Navy, Marine Corps, Coast Guard, and Army Air Forces. It unfolds with dramatic vigor the problems of a typical combined amphibious action in the Pacific. (Jr. High through Adult)

GALILEO'S LAWS OF FALLING BODIES (EBF)

6 minutes—sound—black and white $1.20 2

Designed especially to provide perfectly executed experiments related to Galileo's laws. Utilizes techniques of slow motion and freeze through the film medium. Recreates experiments with the inclined plane and freely falling bodies both in the atmosphere and in vacuum. (High School) (Physics)

GARDEN FOR VICTORY (BH&G)

11 minutes—sound $1.20 2

Planting and care of victory gardens; explains the role food plays in total war. (Jr. High through Adult)

GARDENING (EBF)

10 minutes—sound $1.80 3

Follows a boy and girl through a garden-raising project from the selection of seeds to the harvesting of the crops. Attention is directed to aspects of soils, growth, role of the sun, insect, pests, and to the various parts of plants used for food—leaves, stems, buds, and roots. (Primary through Sr. High)

GEOGRAPHY OF AUSTRALIA (YA)

11 minutes—sound $1.80 3

A concise treatment of the geography of the Australian continent. (Elementary through Sr. High)

Unit Value

GEOGRAPHY OF YOUR COMMUNITY (CORONET)

10 minutes—sound $1.80 3

We join a boy on his way to school and, with him, discover many things about his community—the relationship between its industries and geography, its farmlands and residential areas, and its rivers and highways. This film encourages children to collect and organize data about their own community. (Intermediate, Junior High)

GEOLOGICAL WORK OF ICE (EBF)

11 minutes—sound $1.80 3

The major portion of this film is devoted to the story of glaciers, the types of glaciers, formation, glacial movement, gradation and transportation by glaciers, topographical results of glacier activities as evidenced by moraines, eskers, striated and grooved rocks, cirques, hanging valleys and fjords. (Jr. High through College)

GEOMETRY IN ACTION (LF)

10 minutes—sound $1.80 3

Presents a new and exciting aspect of geometry, giving a broader understanding of how it can be applied to nature, the home, work and play. (Sr. High and College)

GETTING A JOB (EBF)

16 minutes—sound—black and white $2.40 4

Through the experiences of Edward Bartly and three of his classmates, this film explores the variety of leads which are open to high school students in search of a job. It also describes how to use the many aids to job hunters such as personal history, the application letter, and the letter of recommendation. (Guidance)

GETTING ALONG WITH PARENTS (EBF)

14 minutes—sound $2.40 4

Takes a close look at the question of mutual respect between teen-agers and their parents. Six High School students decide to visit a night club after the Junior Prom. Their parents oppose the project for different reasons, disclosing varied family backgrounds and attitudes. The film points out that here, as with all problems, there are two sides and that both sides have a right to be heard. (Guidance)

GIFT OF GREEN (SI)

20 minutes—sound—color $1.20 2

Presented by the New York Botanical Garden to show how the green plant holds the key to all life on earth. Explains in nontechnical language how the green plant, with the aid of sunlight, builds food from water and air. (Jr. High through Adult)

GIFT OF TS'AI LUN—PAPER (HAM)

38 minutes—sound $1.20 2

Explains paper-making, beginning with the forests of Canada where oldest spruce trees are used. The early scenes show how paper was first manufactured in China. (Elementary through Sr. High)

Unit Value

GLASS: FROM THE OLD TO THE NEW THROUGH RESEARCH (EBF)

20 minutes—sound—black and white $3.00 5

Unfolds the story of progress in glass and explains how glass contributes to a high standard of living. Identifies major types of glass by providng exciting scenes filmed in glass factories. Shows the specialized departments that direct modern industries such as glass and emphasizes research, the most recent member of the industrial team to attain importance. (High School and Adult) (Economics) (Social Studies)

GLEN WAKES UP (YA)

11 minutes—sound $1.80 3

A dramatic presentation of the importance of being a "good citizen," designed to stimulate a desire to share responsibilities and privileges, and to build desirable attitudes toward the individual's relationships with others in home, school and community, This is the story of Glen, a young boy who begins to feel that everyone has turned against him; of the strange visit he has one night with Mr. X; and how Glen discovers that life holds more pleasure and more satisfaction when he shoulders his share of the responsibilities. (Elementary and Jr. High)

GLOBAL CONCEPTS IN MAPS (CORONET)

10 minutes—sound—color $3.60 6

Through a student's investigation of maps, audiences will get a clear understanding of these globe representations. How these projections have been designed and improved to meet different uses in the changing world are shown. A simple demonstration of the great circle routes on a polar projection introduces cylindrical, conic and perspective projections with a summary of the practical application of each. (Jr. and Sr. High)

GOING STEADY (CORONET)

10 minutes—sound $1.80 3

Regular dating is a normal step in the progress toward engagement and marriage and should be understood as such. Whether teen-agers realize it or not, "going steady" offers problems and disadvantages, especially for younger teens. So this motion picture raises for discussion such important questions as "When are you old enough to go steady: What disadvantages are there to it? How can you terminate the steady relationship if it seems an unsound one, without hard feelings?" (Jr. and Sr. High)

GOLDEN FOODS (C)

22 minutes—sound—color $1.20 2

A visualization of the U. S. Government basic 7 food chart. One-half of the picture is devoted to recipes containing citrus fruits. (All age groups)

GOLDILOCKS AND THE THREE BEARS (CORONET)

10 minutes—color $3.60 6

Starring three real bears, this much-loved children's story is retold in a presentation which remains faithful to the incidents and characteristics of the original tale. In addition, suggestions for drawing pictures of scenes from the story and exploring other

Unit Value

favorite stories provide children with an incentive for further reading and artwork activities. (Primary)

GOOD EATING HABITS (CORONET)

10 minutes—sound $1.80 3

When youngsters see how Bill becomes ill because of improper eating habits, they're sure to take a new interest in the proper way to eat. They'll see how important it is to eat slowly, chew foods thoroughly, avoid excessive sweet foods, and why they should eat what is served to them at mealtimes. (Primary)

GOOD NEIGHBOR FAMILY (OIAA)

20 minutes—sound $1.20 2

Similarities and differences of Latin American and North American family life significantly explained to better understanding and unity between the Americas. (All Ages)

GOOD SPORTSMANSHIP (CORONET)

10 minutes—sound $1.80 3

Here is a film that not only clearly demonstrates what good sportsmanship is, but motivates a desire on the part of the individual to "be a good sport" himself. Through lively and dramatic story situations, the audience sees a number of examples of individual sportsmanship in action. In these the importance of individual sportsmanship in all phases of daily living is emphasized. (Elementary)

GOOD TABLE MANNERS (CORONET)

10 minutes—sound $1.80 3

Good table manners depend primarily upon attitude. Here this important factor is developed by showing that table manners are a matter of courtesy, consideration for others and common sense. Through an unusual dramatic device in which a 14-year-old boy is brought face-to-face with himself as a young man of 21, audiences will see that they soon will be entering an adult world in which they will be constantly concerned with making a good impression. (Jr. and Sr. High)

GOODBYE MR. GERM (TB)

14 minutes—sound $1.20 2

Animated cartoons and photographs of actual scenes. The germ of tuberculosis tells his life story to Professor Buzel, who has discovered how to talk to germs. (Elementary through Adult)

GRACIAS AMIGOS (OIAA)

15 minutes—sound $1.20 2

The dramatic story of the contribution made by our neighbor southern republics to the winning of the World War II by furnishing raw materials rapidly when other sources of the same materials were cut off. Rubber, nitrates, quartz, sisal, tin, manganese are only a few of these. Someone had to furnish these needed materials—someone had to want to furnish them. This is a story of the good neighborliness of it all. (Elementary through Adult)

GRANDFATHER OF THE BLUE RIDGE (HUGH MORTON)

15 minutes—sound—color $1.80 3

A pictorial essay on the highest mountain in the Blue Ridge range,

Unit Value

Grandfather Mountain. Gives glimpses of many other scenic objectives of visitors to the Mountains of the Tar Heel State, such as Blowing Rock, Craggy Gardens, Roan Mountain, Biltmore House, Linville Falls, Linville Caverns, etc.

GRANT AND LEE AT APPOMATTOX (YA)

27 minutes—sound $3.00 5

Behind the Confederate lines in April, 1865, we see death, starvation, and desertion. The grim situation demands a decision for surrender or guerrilla warfare. General Lee decides for surrender to General Grant. The generals meet and Grant is very generous. The Union celebration is brought to a halt by General Grant's announcement of the assassination of President Lincoln. The two generals' examples of fairness make this an excellent film for young boys. (Junior High through Adult)

GRASSHOPPER, THE: A TYPICAL INSECT (CORONET)

6 minutes—color—sound $1.80 3

One of the most common and widely-known insects in the world is the grasshopper. Its body structure is shown as exemplifying the basic characteristics that identify insects, and its life cycle is studied as typical of those insects which go through a process of incomplete metamorphosis. The need for controlling the grasshopper's destructiveness is also shown. (Intermediate, Junior High)

GRASSLANDS (USDA)

10 minutes—sound $1.20 2

Discusses the problem of soil conservation on the grazing lands of the arid Southwest. Sheep and cattle on the range and approved methods of attack on the evils of overgrazing. (Elementary through Adult)

GRAVITY (CORONET)

10 minutes—sound $1.80 3

This common but important subject is clearly presented in this film through the medium of a variety of everyday examples that all can understand and appreciate. Students are made aware of the force of gravity and are helped to understand its principles. Attraction in relation to mass and distance and the effect of gravity on our Solar System are demonstrated and explained. "Mutual attraction between all bodies" is also made clear through demonstrations and explanation. (Jr. High)

GRAY SQUIRREL (EBF)

11 minutes—sound $1.80 3

Portrays the life of this interesting little animal. Baby squirrels are taught to play and climb. Squirrels from age of one week until they are grown are studied. (Primary and Elementary)

GREAT ADVENTURE, THE (RotaryInternational)

29 minutes—sound—black and white $1.20 2

Through the media of sight and sound the Rotary story is told in an unique and challenging manner. It will arouse quick interest and stimulate many questions, and explains, to groups unfamiliar with the workings of Rotary, the Object and Purpose of the organization. (College-Adult)

Unit Value

GREAT BRITAIN—Trade and Industry (UWF)

20 minutes—sound $3.00 5

Great Britain became a great world power because of her intensively developed industrial potential, a large highly skilled labor force, a transportation system and shipping facilities which have made it possible to import raw materials and ship out manufactured goods at low cost. The film opens in London, nerve center of the British Empire. An animation sequence locates Britain's industries, natural resources, and transportation facilities. The film presents a British family and follows its varied members as they go about their tasks in shipyards, factories and coal mines. (Elementary through Adult)

GREAT LAKES AREA, USA, (Buffalo, N. Y.) (UWF)

20 minutes—sound $3.00 5

In an intensely interesting fashion, this film demonstrates the fact that industrial centers tend to develop where there is a natural focus of trade routes facilitating the supplying of raw materials and the marketing of finished products. Through the eyes of a group of Sea Scouts, we see the basis for the development of Buffalo at the juncture of the twelve large railroads, the terminus of water routes of supply, and near the source of a limitless supply of cheap electric power. (Elementary through Adult)

GREAT LAKES—HOW THEY WERE FORMED (EBF)

11 minutes—sound—color $3.60 6

Uses animated drawings and live action photography to depict the work of glaciers in forming the Great Lakes thousands of years ago. Clearly defines the present-day drainage of the lakes and the physical characteristics of Niagara Falls. Photography of the Lakes and of the region around the Falls illustrates topographical changes which are occurring at the present time. (Elementary and Jr. High)

GREAT LAKES: LINK WITH OCEAN SHIPPING (EBF)

12 minutes—sound $1.80 3

Portrays the Great Lakes as a water route between a region of vast natural resources and the Atlantic Ocean. Depicts Niagara Falls and the rapids and islands of the St. Lawrence River as natural barriers affecting shipping between the Lakes and the Atlantic. Shows the Welland and St. Lawrence River Canals in operation and explains how they have helped overcome these barriers. (Elementary through Adult) (Geography)

GREECE (MOT)

16 minutes—sound $1.80 3

The film shows the heroic struggles of the people of Greece, both during and since the war, as well as the efforts being made for the reestablishment of economic and political order. (Jr. High through Adult)

GREECE—On Mediterranean Shores (UWF)

30 minutes—sound $3.00 5

By their three level system of farming the people of Greece obtain a large part of their food supply. Their proximity to the sea enables them to augment their food supply by fishing during the

Unit Value

season when the land is too dry for farming. A few export crops provide funds with which the people of Greece supplement their relatively poor economy. This is basically the story of a poor people in a poor land, but wringing from the land all that it can provide. (Elementary through Adult)

GREEK CHILDREN (EBF)

16 minutes—sound $2.40 4

Daily activities of a boy and girl of Galazidi, a fishing village in southern Greece. Includes a sequence of a trip to Athens in a fishing boat. (Primary through Sr. High)

GROUND WATER (EBF)

10 minutes—sound $1.80 3

The film brings to attention many phenomena that take place below the surface of the earth. Artesian wells, springs, water table, caves, and wells, are explained by animated drawings and illustrated photography. Geysers, sink holes, petrifaction, concentration of useful minerals, and geode fillings are explained by outstanding examples in the U. S. (Jr. High through College)

GROW YOUR OWN (USDA)

20 minutes—sound $1.20 2

This picture sets forth in light vein the essentials of good gardening. Preparation of the soil, how to lay out a garden, planting, transplanting, cultivating, weed and pest control, and watering. A "dream" sequence shows by stop motion photography how plants grow. Closes with a series of humorous "DONT'S" designed to bring home, through exaggeration, the many pitfalls that might mar the success of an amateur gardener. (Elementary through Adult)

GROWING GIRLS (EBF)

13 minutes—sound $1.80 3

Presents the physiological aspect of menstruation. Concluding sequences deal with the personal habits and cleanliness during the menstrual period, emphasizing the need for rest and relaxation, proper exercise, diet and personal protection. (Jr. High through Adult)

GROWTH OF FLOWERS (CORONET)

11 minutes—sound—color $3.60 6

Presents the growth and life of roses, orchids, jack-in-the-pulpits, daffodils and iris. We see all these flowers emerge from the bud and burst into full bloom. (Jr. High through College)

GROWTH OF INFANT BEHAVIOR: EARLY STAGES (EBF)

10 minutes—sound $1.80 3

The activities and responses of an infant seated in a small chair in a photographic dome are recorded. Simultaneous side-by-side projection gives a comparison of the same infant at different ages. There are also animated diagrams. (Sr. High through Adult)

GROWTH OF INFANT BEHAVIOR: LATER STAGES (EBF)

10 minutes—sound $1.80 3

This is a demonstration of the increasing ability of the infant to

Unit Value

use his hands in manipulating objects. The growth of the prenatal hand is also shown, by a series of animated drawings. (Sr. High through Adult)

GUADALAJARA (OIAA)

18 minutes—sound—color $1.20 2
A sightseeing tour through Mexico's second largest city. (Elementary through Adult)

GUATEMALA—Cross Section of Central America (UWF)

20 minutes—sound $3.00 5
Four hundred years after the Spanish conquest you still hear the ancient Indian languages of the Guatemalans and sense the feeling that time has stood still. The camera places you with these people and you at once feel the physiographic impact of the country upon them. In the wet season, you live with a family of chicle gatherers in the Peten wilderness; in the dry season you watch them at work in the forest and hear the crash of giant trees someday to become mahogany furniture. You move with these Indians to their homes on the cool, high plateaus where terraced farms cover hilly areas and familiar vegetables are grown together with the coffee bean and banana. Thence to Guatemala City and despite its modern aspects, its people and their way of life are plainly seen to be influenced by all the geographic contrasts of their nation. GEOGRAPHIC CONCEPT: Changes in altitude are reflected in changes of climate, products and mode of living. (Elementary through Adult)

GUN FIGHT AT THE O.K. CORRAL, THE (YA)

27½ minutes—sound $3.00 5
A famous gun fight marked the beginning of the end of gunplay in the Southwest, as Wyatt Earp, his brothers Virgil and Morgan, and Doc Holliday kill the Clanton and McLowry gang at the O.K. Corral in Tombstone, Arizona. The Clantons and McLowrys had been trying to provoke a fight, and Ike Clanton had been wearing guns against the law in Tombstone. The Earps and Holliday were tried and acquitted, the judge ruling the homicides in the line of official duty. (Junior High through Adult)

HALLOWEEN PARTY (EBF)

6 minutes—sound—color $1.80 3
Planned to motivate reading in the primary grades, this interesting little film portrays young children engaged in creative activities in familiar home and school situations. Children love the amusing story of how young Peter, his family, and his dog Waggles survive some rather involved mishaps growing out of their plans and preparations for Halloween. (Primary)

HALOGENS (CORONET)

10 minutes—sound $1.80 3
Laboratory demonstrations present the physical and chemical properties of fluorine, chlorine, bromine and iodine—free and in compound. Slow motion camera reduces the speed of experiments and offers an opportunity to see the most detailed points in each of these important demonstrations. (Sr. High)

Unit Value

HAMILTON, ALEXANDER (EBF)

20 minutes—sound $2.40 4
Re-enacts episodes in the life of a leading figure in the formation of the American nation. Reveals Hamilton as a boy-businessman in the West Indies; points up his role in the American Revolution; dramatizes his part in the adoption of the Constitution; portrays his career as the first Secretary of the Treasury; re-enacts events which led to his death at the hands of Aaron Burr. (Jr. and Sr. High)

HAMILTON-BURR DUEL, THE (YA)

27½ minutes—sound $3.00 5
On July 11, 1804, there is a report that Aaron Burr, Vice President, has challenged Alexander Hamilton to a duel. We learn of the personal conflict that led up to the challenge, and watch Burr and Hamilton prepare for the duel. Hamilton will fire overhead because dueling is against his religious principles. Burr kills Hamilton and public furor forces him into temporary exile. Cronkite alludes to the influence of these two men on American history, and to Burr's subsequent exploits. (Junior High through Adult)

HAND INDUSTRIES OF MEXICO (CORONET)

10 minutes—sound—color $3.60 6
Beginning with the hand molding of roof tiles, so characteristic of the country, the film takes us through the various steps in the making and decorating of glazed ornamental tile, handmade shoes, silver and jewelry, and the exquisite lacquer work of the Patzcuaro Lake region. Emphasis is not only on the art objects themselves, but also on the place of native arts in the lives of our Mexican neighbors. (Elementary through Adult)

HANDICRAFT TOWN (AFFlms)

10 minutes—sound $1.20 2
Maniago, a small town in northern Italy, is known the world over for the quality of its hand-wrought cutlery. But a tradition that has persisted since the 14th century seemed on the point of dying out until E.R.P. funds restored the flow of coal and steel to Maniago. Production now is back to pre-war standards. The film includes a generous demonstration of the technique of knifemaking by hand as practiced by one of the world's finest artisans, a native of Maniago. (Sr. High through Adult)

HANDLE WITH CARE (OWI)

20 minutes—sound $1.20 2
Chemistry is playing an increasingly important role in this war. Animated diagrams tell the story of TNT. (Sr. High through Adult)

HANDMADE MATERIALS FOR PROJECTION (UNIV.IND.)

19 minutes—sound—black and white $3.00 5
Illustrates how to make projection materials for the 3¼"x4" and 2"x2" slide projectors, the overhead projector and the opaque projector. It shows techniques for lettering, and different methods of coloring materials for use on these projectors. The process for preparing carbonfilm and lifting pictures from magazines to acetate are well handled. (College-Adult)

Unit Value

HAPPY VALLEY (NFB)

11 minutes—sound—color $1.20 **2**

The peaceful pattern of life in an Acadian valley of Nova Scotia. Here, in Evangeline's country, the small boy fishes in the stream, the apple blossom blows gently in the wind, feathered inhabitants welcome the visitor with song, and the harvest is gathered in traditional way. Goslings swim on a pond, a bullfrog croaks in the rushes; a chicken breaks, wet and stringy from its shell, in never-ending miracle. As the seasons turn the apple crop ripens and the happy valley lies rosy in the sun, filled with the picturesque charm and mellow color of this Canadian province. (Primary through Adult)

HARE AND THE TORTOISE (EBF)

11 minutes—sound $1.80 **3**

This classic Aesop fable comes alive in this charming film. Real animals play all the roles; a sly fox lays the course for the race; a wise old owl acts as judge; and the steady tortoise finally defeats the boastful hare in an exciting finish. Other characters include a squirrel, a goose, a skunk, a rooster and a raccoon. (Primary and Elementary)

HARVEST FOR TOMORROW (USDA)

30 minutes—sound $1.20 **2**

Products of the soil of New England and the dairy region of the Northeast. All characters are real farm and village people. Scenes of New England countryside—its orchards, pastures, and valleys. (Elementary through Adult)

HATFIELD-McCOY FEUD, THE (Y.A.)

27 minutes—sound $3.00 **5**

January 1, 1888, a high point in the bitter feud which involved citizens of Kentucky and West Virginia. A glimpse of the bitterness which developed in local arguments in early America, and a dramatic example of what happens when violence replaces due process of law. (Junior High through Adult)

HE ACTS HIS AGE (McGRAW-HILL)

13 minutes—sound $1.80 **3**

This film shows that there are normal, predictable signs of development at every age level in childhood. If we work at how they behave at certain ages, we can give our children the right help at the right time. (College and Adult)

HEART AND CIRCULATION (EBF)

10 minutes—sound $1.80 **3**

The mechanics of the pulmonary and systematic systems detailed, with delineation of the heart action. Amplified heart beat sounds. Microscopic scenes of capillary action. Blood pressure and its relation to health. (Jr. High through College)

HEIDI (TFC) (See regulations—last page)

45 minutes—sound $4.80 **8**

Condensed version of the photoplay based on the book of the same title. (Primary through Jr. High)

Unit Value

HELICOPTER, THE (EBF)

11 minutes—sound $1.80 3

The opening scenes of this film point out the unique contribution of the helicopter to transportation: air mail direct to the roof of the post office, crop dusting, surveying inaccessible swamps, and air rescue work, as well as many other chores. But most important of its uses, the film points out, is its eventual utility as a passenger vehicle, combining its ability to fly with the automobile's ability to go directly to and from its destination. (Junior and Senior High)

HELP WANTED (JOHNSON & JOHNSON)

31 minutes—sound $1.20 2

Shows the basic principles of First Aid and the general procedures in caring for victims before the doctor arrives. It shows the circulatory system of the human body, methods of stopping bleeding from cut arteries and veins, treatment of shock, proper methods of applying and handling various types of bandages, treatment of burns, artificial respiration, treatment of fractures, and methods of transporting the injured. (Jr. High through Adult)

HELPING THE CHILD ACCEPT THE DO'S (EBF)

11 minutes—sound $2.10 3

Portrays the child learning to live in a world defined by the Do's, and explains how his personality is influenced by the extent to which the Do's are accepted. Illustrates, with life situations, the types of Do's the child must learn to accept: (1) the Do's for personal living, (2) the masculine and feminine Do's, and (3) the Do's for human relations. (Sr. High through Adult)

HELPING THE CHILD FACE THE DONT'S (EBF)

10 minutes—sound $1.80 3

Reveals how the young child meets a world of Don't and how he reacts by conforming in his own distinctive ways—thus forming his own individual personality. Classifies the Don't as (1) those which protect the child from danger, (2) those which restrain him from taking things that belong to others, and (3) those which teach him to respect the rights of others. (Sr. High through Adult)

HERE IS TOMORROW (CO-OP)

35 minutes—sound $3.00 5

Shows how men and women working together as neighbors have built a "people's business," owning streamlined grocery stores and warehouses, and fertilizer factories, insurance businesses, service stations, pipelines, and oil wells. The picture is a testament to the ability of people to help themselves—a sample of the future. An inspiring, effective and encouraging film, for all age levels and groups. (Jr. High through Adult)

HEREDITY (EBF)

10 minutes—sound $1.80 3

Through the use of animated charts and animal picturization, Mendelian laws of inheritance are presented. (Jr. High through Adult)

Unit Value

HEREDITY AND ENVIRONMENT (CORONET)

10 minutes—sound $1.80 3
A sound understanding of the influences that shape our lives is fostered in this motion picture by presenting clear visual examples of heredity and environment at work. Audiences learn the full meaning of heredity which gives us certain basic capabilities, and environment which helps determine the extent and direction of our use of those capabilities. An overview of cultural inheritances, genetics, environmental influences and their interrelationships is presented in a forceful, accurate manner. (Jr. and Sr. High)

HERITAGE WE GUARD (USDA)

30 minutes—sound $1.20 2
Shows the damage to soil and wildlife that accompanied the winning of the continent by westward migration; the value of such life and current activities in restoration. (Jr. High through Adult)

HIGH OVER THE BORDER (OIAA)

11 minutes—sound $1.20 2
An example of the unity of the two hemispheres as shown by the migration of birds between North and South America. The migrations of humming birds, wild ducks and other types of birds are described and their flights shown in detail through the medium of actual photography and animated maps. (Jr. High through Adult)

HIGH PLAIN (OIAA)

20 minutes—sound $1.20 2
A story of the descendants of the Aymara tribe living on the high plain of Bolivia. For 20 centuries, even before the time of the Incas, they have tilled the soil of the plain and have retained most of their primitive customs and modes of working and living. (Elementary through Adult)

HIGH SCHOOL: YOUR CHALLENGE (CORONET)

12 minutes—sound $2.40 4
This film, by looking back at the high school career of a graduating senior, emphasizes the future importance of a good high school education and the advantages of taking part in extra-curricular activities. It is designed to help handle the drop-out problem and to make high school more meaningful for all. (Jr. and Sr. High)

HIGH SPOTS OF A HIGH COUNTRY (OIAA)

20 minutes—sound—color $1.20 2
An introduction to Guatemala with its volcanoes, its market places, its craftsmen, its coffee plantations, and the pictorial beauty of its natural scenery. (Jr. High through Adult)

HIGHLAND HOLIDAY (NFB)

10 minutes—sound—color $1.20 2
Nova Scotia, Atlantic Gateway to Canada, is marked by the ebb and flow of history. The film notes the momentoes of early struggles—French Port Royal and British Annapolis—and journeys on the Cape Breton Highland National Park. Facilities for golf,

Unit Value

tennis, salmon and trout fishing abound. (Elementary through Adult)

HIGHWAY MANIA (GUT)

9 minutes—sound—color $1.20 2

Features Lowell Thomas and illustrates through typical accidents the dangers of reckless driving. Constructive suggestions and criticisms on how to correct this evil. (Sr. High through Adult)

HILL TOWNS OF GUATEMALA (OIAA)

9 minutes—sound—color $1.20 2

A story of the simple lives, the handicrafts, the clothing, and the age-old customs of the Indians that cluster about Lake Atitlan. (Jr. High through Adult)

HINDU FAMILY (EBF)

11 minutes—sound $1.80 3

A story centering around the marriage of a young girl living in the province of Gujaret, India. Dramatically illustrates important aspects of Hindu life including school, home, clothing, and preparation of a meal. Depicts the village goldsmith, potter, and weaver at their work, and emphasizes the role of religious ceremony in the daily lives of the people. (Elementary—social studies)

HISTORIC HIGHWAY—LOWER CANADA (NFB)

17 minutes—sound—color $1.20 2

In the steps of Canada's earliest explorers and settlers we follow the St. Lawrence from Gaspé to Lachine, visiting en route the scenes of colourful incidents in the history of New France. The defense of this colony against the hostile Iroquois and the British is recalled in the story of Madeleine de Vercheres and in scenes of Port Chambly and of the Plains of Abraham where the fate of Canada was finally decided. Old and new influences mingle in Montreal, where we see modern McGill University as well as the Chateau de Ramezay, now a museum for relics of the city's early days. (All Ages)

HISTORIC HIGHWAY—UPPER CANADA (NFB)

18 minutes—sound—color $1.20 2

Battles long ago in Canada's troubled past are recalled in a tour of historic sites from Chrysler's farm on the St. Lawrence to Amherstburg on the Detroit River. Along the way we see fortifications that were used in the defense of Canada against American invaders, and are reminded of the events in which they played a part. Memorials to such heroes as General Brock and Laura Secord are also visited in this trip through the lovely countryside bordering the upper St. Lawrence and lower Great Lakes. (All Ages)

HISTORIC SCENES ALONG THE MOUNT VERNON HIGHWAY (USDA)

15 minutes—silent $1.20 2

Colonial homes and public buildings of historic interest on the highway from Washington, D. C., to Mount Vernon. (Elementary through Adult)

HISTORY IN YOUR COMMUNITY (CORONET)

15 minutes—color $4.80 8

Unit Value

History is all about us. A number of eighth grade students discover this when they begin to look, read, and ask about the history of their community. An old elm tree, an abandoned well, and early tombstone inscriptions assume historical significance as the students learn that their community's history is part of the history of our country. Their method of historical exploration can be adopted by any group—in any community. (Intermediate, Junior High)

HOFFMAN'S FAREWELL TOUR (AFFlms)

9 minutes—sound $1.20 2
After two and a half years as administrative head of E.C.A., Paul Hoffman retired from that post late in 1950. This film documents a three week inspection tour to eight of the Marshall Plan nations to see at first hand the effectiveness of his organization's activities. (Sr. High through Adult)

HOLIDAY ISLAND (NFB)

10 minutes—sound—color $1.20 2
Georgian Bay Island's National Park might be called the island of youth. HOLIDAY ISLAND shows where the park is located, then plunges into a host of activities directed by the youth organizations whose permanent camps dot the island. Once the home of Huran Indians it is now the vacationland for youth. (Elementary through Adult)

HOLLAND—Land Behind the Dikes (UWF)

20 minutes—sound $3.00 5
In lowlands by the sea, it is possible to enlarge farming areas by draining off the water and reclaiming the land. Small densely populated countries have found this practice to be advantageous. In this picture, we study how these principles apply to the Netherlands, a low country, nearly half of whose area is below sea level. The Dutch people have been working hundreds of years making new land by draining swamps, shallow lakes, and even the sea itself. The reclaimed land, known as Polderland, is very productive. Farm products often move to market by boat on the canals. The land has been drained by dikes, canals and windmills. Today, modern pumping stations are replacing the more picturesque windmills. (Elementary through Adult)

HOLMES, OLIVER WENDELL (EBF)

20 minutes—sound $2.40 4
Reveals, with dramatized episodes from Holmes' life, the reasons for his position of eminence in our national cultural history. Portrays him as he drops the study of law for medicine, and outlines his later accomplishments in that field. Points out Holmes' contributions as a man of letters and as a lecturer, highlighting events incidental to the writing of "Old Ironsides," *Autocrat of the Breakfast Table*, and other works. Emphasizes the man's genial personality, his broad perspective, his intolerance of dogmatism; and reveals him as an exponent of the scientific method. (Jr. and Sr. High)

HOME COOKERY OF FISH (EBF)

10 minutes—sound $1.80 3
Shows three basic methods of cooking fish in the home: boiling,

Unit Value

broiling, and baking. Fish used demonstrate the various ways in which fish are marketed: fillets, steaks and whole fish. The fish selected represent types from the Atlantic, the Pacific and the Great Lakes. Methods for wider distribution over all parts of the U. S., such as refrigerated transportation and quick freezing, are depicted. Emphasis is laid upon a variety of materials and kitchen equipment to inform students of what is available and to stimulate classroom discussion. (Jr. and Sr. High)

HOME ELECTRICAL APPLIANCES (EBF)

11 minutes—sound $1.80 3

Explanation of the common heating and motor appliances in the home. Animated drawings illustrate alternating currents throughout, while scientific principles are stressed. (Jr. High through Adult)

HOME MANAGEMENT: WHY BUDGET (YA)

11 minutes—sound $1.80 3

Discusses the importance of the budget to individuals and families of all income levels. Explains what the budget is, how it is set up in relation to needs and income, and what is to be gained by following a well-planned budget. (Jr. High through Adult)

HOME NURSING (EBF)

10 minutes—sound $1.80 3

Demonstrates, in pratical fashion, the proper procedures in caring for the sick in the home. Describes how to arrange the bed, how to bathe and move the patient in bed, and the importance of making the patient generally comfortable. Explains techniques of taking and recording temperature, pulse, and respiration rates; giving medication, and feeding the patient during convalescence. (Jr. and Sr. High)

HONEST WOODSMAN (CORONET)

10 minutes—sound $1.80 3

This is a Grecian-moral folk-tale of an honest woodsman and his meeting with the god, Mercury. Translated by the Coronet puppeteers. (Primary and Elementary)

HONEY BEE (EBF)

11 minutes—sound $1.80 3

Describes the development of the honey bee with due emphasis upon the role of the workers, the queen, and the drones. Egg, larva, and cocoon stages in the lives of the workers are shown in detail. The building of a new cone and honey making follow in natural sequence. (Jr. High through Adult)

HOPI INDIAN (CORONET)

10 minutes—sound $1.80 3

We are taken to the land of the Hopi in Arizona's Grand Canyon where we see his way of life—the crops he raises, the food he cooks, and even his secret marriage ceremony. Here is the rare opportunity to observe a typical Indian pursuing his work and performing his ceremonies against the background of his western home. (Elementary)

Unit Value

HOPI INDIAN ARTS AND CRAFTS (CORONET)

10 minutes—sound—color $3.00 5

To continue the study of the Hopi Indians, this film centers on his distinctive handicrafts. Weaving, silversmithing, basket making and pottery making are all shown in detail. This film is a record of the skill and patience required in these rapidly disappearing native arts. (Elementary)

HOPPY, THE BUNNY (CORONET)

10 minutes—color $3.60 6

One beautiful morning, Hoppy meets his friends, the raccoon and the owl, and for the first time hops out of the deep woods and sees life on a farm. He meets chickens, pigs and tame white rabbits; then, after being chased by a dog, Hoppy returns home safe and sound. This lovable story of Hoppy will lead youngsters naturally into more meaningful reading, drawing and singing activities. (*Primary*, Low Intermediate)

HOUSE-FLY (EBF)

10 minutes—sound $1.80 3

The complete story of this common but extremely dangerous pest. The four stages of the fly's life cycle are shown—egg, larva, pupa, and adult. Its activities as a carrier of disease germs are presented vividly. The picture illustrates effective means for eliminating the fly menace. Special emphasis is laid on community action. (Jr. High through Adult)

HOUSE I LIVE IN, THE (YA)

10 minutes—sound $1.20 2

An Academy Award picture starring Frank Sinatra. Skillfully develops the theme of understanding religious and racial problems. A group of boys find common interests through the leadership of Sinatra who sings two songs. (Primary through Adult)

HOUSE OF SEVEN GABLES (TFC) **(See regulations—last page)**

45 minutes—sound $4.80 8

The story of the Pyncheon legend and its effect upon the descendants of unscrupulous old Colonel Pyncheon is told creatively in this screen dramatization. Realistic period atmosphere and convincing characterizations secure effective interpretation of Hawthorne's great novel. (Sr. High through Adult)

HOUSING IN CHILE (OIAA)

19 minutes—sound $1.20 2

A story of the progressive steps now being taken by Chile in the housing problem. A typical family in Santiago is shown first living in the slums and then being transported into one of the new housing projects. (Elementary through Adult)

HOW A BILL BECOMES A LAW (PF)

20 minutes—sound $2.40 4

Laws, as created by our legislative body, administered by our executive body and applied by our judicial, are part of each citizen's life. How many of us, however, know exactly how a law is made? Where does it originate, through what procedure does it go, and what makes it a "law of the land?" Each step is sharply

Unit Value

defined, illustrated, and visualized. All possible ways of creating new laws are demonstrated. This film is a must for all high school students. (Jr. and Sr. High)

HOW BIG ARE ATOMS? (Ind. U.)

27 minutes—sound $4.80 8

Discusses the importance of knowing whether or not atoms really exist and determining their exact size. Reviews the many different but precise and identical determinations of the size of atoms. Presents several demonstrations of the size of atoms relative to what can be seen. Suggests that the world of the atom is not as far away as we may have believed. (College, Adult)

HOW BIRDS FEED THEIR YOUNG (EBF)

6 minutes—silent—color $1.20 2

A color film of a number of mother birds feeding and caring for baby birds. We see the indigo bunting, bluebird, thrush, cedar waxwing, humming bird, goldfinch, heron, snakebird, quail and grouse. (Primary through Sr. High)

HOW DO YOU DO (YA)

15 minutes—sound $1.80 3

Points out how we have more enjoyment out of life by being sure of ourselves in social situations and demonstrates the rules to be observed in one such situation—introducing and meeting people. (Elementary through Sr. High)

HOW DO YOU KNOW IT'S LOVE (CORONET)

14 minutes—sound $2.40 4

When it comes to defining the term "love" there is much halting and disagreement. What is the nature of love? How does it grow and develop in an individual? How can you tell when a love is mature? This film gives students of every age a basis for thinking clearly about love and shows clearly that mere conviction of love is not enough to insure lasting happiness. (Sr. High)

HOW DO YOU STAND (Nat.ChiropracticAssn.)

13 minutes—sound—color $1.20 2

The purpose of this film is to show the correct posture for the body and the consequences from lax or improper posture. (Jr. High through Adult)

HOW FRIENDLY ARE YOU? (CORONET)

10 minutes—sound $1.80 3

The ways that young people cultivate friends are often obscured by the artificial bonds of belonging to a clique or school "crowd." So this motion picture sets out to present some of the values of being friendly and encourages the broadening of one's range of friends. Friendliness is shown to be a two-way proposition involving generosity, consideration and a sincere interest in other people. (Jr. High)

HOW HONEST ARE YOU? (CORONET)

14 minutes—sound $2.40 4

Students usually understand that honesty is a good thing; they don't have much trouble with simple honesty. But in some situa-

tions, honesty is a much deeper problem and it is this type of situation that is analyzed in this film. From it audiences are able to draw certain conclusions about what honesty is and how a person may apply the test of honesty to his thoughts and actions. (Jr. and Sr. High)

HOW MAN MADE DAY (CORONET)

10 minutes—sound $1.80 3

From primitive to modern times, this film traces the development of illumination. It is the story of how man learned to reduce the heat and increase the light of fire, improving his method of illumination until he could flood homes and cities with an artificial light that turned night into day. (Elementary)

HOW NATURE PROTECTS ANIMALS (EBF)

10 minutes—sound $1.80 3

This film presents and describes various ways by which animals are provided with devices to conceal themselves, either for the purpose of protection, or as a means of securing food. Examples are given of natural protection through fleetness of foot, mimicry, protective coloration, armor and secluded homes. (Elementary through College)

HOW OUR BODIES FIGHT DISEASE (EBF)

10 minutes—sound $1.80 3

Uses animation and microscopic photography to explain the part that the skin and mucous membranes, the lymph system and the blood play in defense against disease. The function of the parts of the blood and antibodies is clearly defined.

HOW TO ADD FRACTIONS (JOHNSON-HUNT)

10 minutes—sound—b&w $1.80 3
10 minutes—sound—color $3.60 6

This film will enrich the mathematics curriculum of any school. Elementary teachers and pupils will be delighted with the media used in creating this film. It covers the subject matter area of: the meaning of numerator and denominator; adding fractions that are alike; how to add fractions that have different denominators. It is highly adaptable for remedial work and is recommended in making fractions come to life. (Elementary)

HOW TO BE WELL GROOMED (CORONET)

10 minutes—sound $1.80 3

Don and Sue are two young people anyone would look at and want to know. This film shows how they improve their personal appearance through attention to good grooming habits. It demonstrates to students the four fundamentals of good appearance; good health, good posture, cleanliness, and neatness. With Don and Sue as living models, they realize that, in friendships and in business, success depends a great deal on how you look. (Jr. and Sr. High)

HOW TO CONCENTRATE (CORONET)

10 minutes—sound $1.80 3

All too often there are so many sources of distraction that concentration on studies, business matters, or personal matters seems to be difficult, even impossible. With an understanding of how to concentrate, however, much can be done to overcome the bad effects of distractions. Audiences will learn, for example, to select one

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thing upon which to concentrate and to give it full attention. Then by following other "habits" the ability to give proper attention to a task will be developed. (Jr. and Sr. High)

HOW TO FIND THE ANSWER—Mathematical Problem Solving (CORONET)

10 minutes—sound $1.80 3

This film makes an important contribution to clear thinking, for it encourages a systematic attack of mathematical problems both in and out of school. In doing so, it offers students an excellent exercise that can be utilized in solving problems in any subject. Here is presented and demonstrated a clearly defined procedure for working out problems after they have been established. The film explains the importance of useful procedures in solving mathematical problems and others with which the student may deal. (Jr. and Sr. High)

HOW TO GET COOPERATION (CORONET)

10 minutes—sound $1.80 3

Necessity for ground action in our society makes this film important to students. It shows some of the methods for securing cooperation and practical use of them in a school situation. The objectives of cooperation are first detailed and then typical situations which demand cooperation are then presented. Finally the basic techniques for actually achieving the assistance of others are put into practice (Jr. and Sr. High)

HOW TO GIVE AND TAKE INSTRUCTIONS (CORONET)

10 minutes—sound $1.80 3

The giving and taking of instruction is important in all walks of life. This motion picture, useful in a variety of school, vocational, and social situations, presents five basic skills necessary for clear and effective communication and instruction, including the ways to give and also to receive them. (Jr. and Sr. High)

HOW TO GROW HOGS (USDA)

21 minutes—silent $1.20 2

Scenes taken on the Experimental farm of the Bureau of animal industry at Beltsville, Maryland, where the practices were developed, showing points to be considered in the selection of hogs for breeding purposes, care of the sow before and after farrowing and the feeding and handling of pigs up to marketing time. (Sr. High through Adult)

HOW TO JUDGE AUTHORITIES (CORONET)

10 minutes—sound $1.80 3

Like all of us, Bill encounters a puzzling conflict between statements of "authorities." But unlike most of us, Bill considers the "internal evidence" on each authority, the experience from which each speaks, and the evidence of his own experience to reach sound decisions. (Jr. and Sr. High)

HOW TO JUDGE FACTS (CORONET)

10 minutes—sound $1.80 3

Material learned from this motion picture will extend into almost all activities of social living. From it, students will learn how to

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separate facts from assumptions and faulty reasoning. Using a case study of a false story, the film teaches the common errors in thinking. Students not only will appreciate the value of dependable information, but also will be on their guard against assumptions, false analogies, irrelevant facts and double-meaning words. (Jr. and Sr. High)

HOW TO KEEP A JOB (CORONET)

10 minutes—sound $1.80 3

Job success is dependent upon more than a wise selection of vocation, more than the right attitude toward work itself, more than the wise selection of a particular position. Although all of these are important. Job success means getting along with fellow-workers, conduct of work and several other factors which this film explains vividly in the context of a fascinating story. (Jr. and Sr. High)

HOW TO MAKE A TV FILM COMMERCIAL (FORD)

28½ minutes—sound—color $1.20 2

The work of more than two hundred skilled craftsmen—writers, artists, photographers, specialists of many kinds—is pictured against the backdrop of advertising agency and client supervision as a set of six film commercials is made for television. Emphasized are the skill and care that go into making the selling messages on TV. (Senior High through Adult)

HOW TO MAKE HANDMADE LANTERN SLIDES (IndU)

22 minutes—sound—color $4.20 7

The basic production techniques for eight types of handmade lantern slides are featured. Teachers demonstrate how to make the types of slides most appropriate for use on various grade levels. Many suggestions concerning sources of content materials and uses for the various slides are also presented. (Jr. High through Adult)

HOW TO READ A BOOK (CORONET)

10 minutes—sound $1.80 3

Here is the "know how" of intelligent reading. Chuck finds he can grasp ideas and attitudes as well as facts when Ray shows him how to adjust his reading speed to his reading purposes. Ray tips him off to using a book's mechanical aids such as the preface, footnotes and index and gives practical advice on selecting the best books for a particular purpose. (Jr. and Sr. High)

HOW TO REMEMBER (CORONET)

10 minutes—sound $1.80 3

Everyone realizes that remembering is important, but the problem is *how* to remember. This film demonstrates the use of a very practical procedure for remembering given material. How to memorize a selection is shown specifically while explaining the whole process of remembering. Types of remembering are explained and six basic rules for making remembering easier are presented. (Jr. and Sr. High)

HOW TO SAY NO (CORONET)

10 minutes—sound $1.80 3

The central theme of this fascinating guidance film is: "How to

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say 'no' and keep your friends." Beginning with situations in which saying "no" is relatively easy, the discussion moves to how to say "no" when asked to become involved in undesirable activities. Good taste combined with a challenge to learn to say "no" gracefully characterizes this film. (Sr. High)

HOW TO STUDY (CORONET)

12 minutes—sound—color $3.60 6

Here is a film designed to motivate better study habits as well as give practical hints on study techniques. A ninth grade student is preparing a report for a class in civics. As we follow him through the steps of preparation, we see the way he budgets his skills employed in skimming, rapid reading, and careful study; and in other outside sources. (Elementary through Sr. High)

HOW TO THINK (CORONET)

10 minutes—sound $1.80 3

A traffic ticket for driving his delivery car without a commercial safety sticker gives Dick cause to do a lot of straight thinking. By following the film's suggested procedure for clear and careful thinking he is able to solve his problem successfully. The important elements of concentration, logic, observation, memory, imagination and judgment are all presented as part of the correct "way to think." (Jr. and Sr. High)

HOW TO TWIRL A BATON (YA)

10 minutes—sound $1.80 3

Demonstrates the following nine movements with the baton: beating time, salute, wrist-twirl, figure-eight, two-hand twirl, pass-around-back, cartwheel, four-finger twirl and throw-and-catch. (Elementary through College)

HOW TO WRITE EFFECTIVELY (CORONET)

10 minutes—sound $1.80 3

Important rules for effective writing are demonstrated in this film. Material, audience and purpose are offered as elements which must be considered. The picture discusses the factors involved in editing and offers a unique exercise in classroom participation. (Jr. and Sr. High)

HOW TO WRITE YOUR TERM PAPER (CORONET)

10 minutes—sound $1.80 3

Through the use of a personalized "audience participation" techinque, this motion picture guides student audiences through the steps of preparing a term paper. They see how to select a subject, gather the necessary information, organize it and develop the actual report. Value of checking sources of reference, working from an outline and using correct form, grammar and footnotes is stressed. (Jr. and Sr. High)

HOW WE ELECT OUR REPRESENTATIVES (CORONET)

11 minutes—sound $1.80 3

This film explains the functional basis of our democracy, the election system. Registration, primaries, electioneering, voting, counting ballots, and the overview of the responsibility of voting intelligently to make our democracy work are presented. (Elementary through Adult)

Unit Value

HOW WE GET OUR POWER (YA)

10 minutes—sound $1.80 **3**

This film explains how all of our power comes from nature—from wind, water, fuels, explosives, and the atom. (Jr. High through College)

HOW WE LEARN (CORONET)

10 minutes—sound $1.80 **3**

Through the guidance of one of his teachers, a high school boy finds the big principles which make for effective learning—a ready mind and appropriate materials. Using goals, competition and cooperation, working with the teacher, and seeing sense in what you are doing bring a ready mind to any learning situation. (Jr. and Sr. High)

HOW YOUNG AMERICA PAINTS (ASSN. F)

10 minutes—sound—color $2.40 **4**

This is the 1941 exhibition of Young America Paints, held annually in the American Museum of Natural History, New York. The sequences of this picture consist of paintings and drawings in various mediums. (Elementary through Sr. High)

HUMAN BEGINNINGS (ASSN. F)

22 minutes—sound—color $4.80 **8**

In the first part we see what a group of children believe about the origin of human life as expressed in their own drawings. The second part of the film shows how a young boy and his parents re-act to the coming of a new baby sister into the family. One of the main uses of the film is to provide a basis for discussion by children of 5 and 6 years of age, or older. (Primary through Jr. High)

HUNTING WITH A CAMERA (NFB)

17 minutes—sound—color $1.20 **2**

The thrills of the chase can be recaptured time and again when hunting is done with a motion picture camera. For this film animals, fish and water birds were "shot" to provide a living picture gallery of Canada's wild life. A group of children, visiting a natural history museum, sit spellbound watching a passing parade of water birds, buffalo, coyotes, Rocky Mountain sheep, elk, moose, caribou, beavers, bears—all photographed in their natural environment. After this experience the children try some hunting on their own and achieve several good shots of deer in a winter park. (Elementary through Adult)

HURRICANE WATCH (USWEATHERBUR)

12 minutes—sound $1.20 **2**

Depicts the origin, path and a striking area of a hurricane. Shows the method of spotting, studying and predicting the path of a hurricane, along with how the people are warned of an advancing storm and the proper precautions to take. (Jr. High through Adult)

I WANT TO BE A SECRETARY (CORONET)

15 minutes—sound $2.40 **4**

Deals with clerical aptitudes. Gives aspirants important clues as

Unit Value

to their own chances of success in this particular field. (Sr. High and College)

IBERIAN PENINSULA (EBF)

10 minutes—sound $1.80 3

Provides significant overview of modern Spain and Portugal. Depicts, with animated drawings, the chief topographic and climatic features of the Peninsula and portrays people at work in various types of agricultural pursuits and in fishing, mining, and industry. Emphasizes especially the Peninsula's limited industrialization and the age-old agricultural technique generally employed in the region. (Elementary through Sr. High)

IDAHO AND ITS NATURAL RESOURCES (U.S. DEPT. OF INTERIOR)

30 minutes—sound—color $1.20 2

The rich mineral and agricultural secources of the State of Idaho, as well as its natural beauty and scenic attractions, are realistically portrayed. Historic episodes of the Lewis and Clark Expedition, early fur trapping, the gold rush of the 1850's, and early mining history are shown, as well as the Gem State's farms, cattle ranches, giant lumbering industry, cities, modern mine and processing plants for minerals. Exhilarating ski runs at Sun Valley and authentic hunting and fishing scenes add exciting moments. (Jr. High through Adult)

IMMIGRATION (EBF)

10 minutes—sound $1.80 3

Shows by photographs and animated maps how the United States became populated, and why Europeans left the Old World for the New. Photographic scenes of families leaving their homes for this country tell the human side of the story. Peasants fleeing from economic exploitation, political refugees and religious fugitives are all depicted in scenes which conclude with shots of Ellis Island and the induction into full American citizenship of immigrants. (Jr. High through Adult)

IMMUNIZATION (EBF)

10 minutes—sound $1.80 3

Explains what immunization is and how immunity to infectious diseases is attained. Recalls that immunity to some diseases is effected through actual illness, and then demonstrates how the injection of vaccine into the human body may build up resistance to an infection just as the actual illness would have done. Explains how vaccine for smallpox, pneumonia, and diphtheria is perpared and used. (Sr. High through Adult)

IMPORTANCE OF GOALS (McGRAW-HILL)

19 minutes—sound $3.00 5

The case of 13-year-old Tommy illustrates the principle that all education is essentialy a process of attaining basic, meaningful goals. (College and Adult)

IMPORTANCE OF MAKING NOTES (CORONET)

10 minutes—sound $1.80 3

Note-taking, as an important study aid, has great value to students in almost every course. This motion picture presents the important skills of good note-taking. Through it, audiences will

Unit Value

learn how good notes are taken in oral instruction periods and during reading. They will see how to find the key ideas for notes, what sort of materials should be taken down verbatim and when notes should not be taken at all. (Jr. and Sr. High)

IMPROVE YOUR HANDWRITING (CORONET)

10 minutes—sound $1.80 3

This picture helps youngsters learn for themselves how to improve handwriting. It may be used in classes which offer handwriting instruction and in classes in which teachers wish to stress the fundamentals of good handwriting in an efficient and effective way. (Elementary)

IMPROVE YOUR PERSONALITY (CORONET)

10 minutes—sound $1.80 3

It's important that young people realize that personality is not a vague, glamorous attribute of the fortunate few but a part of each individual's character. Through this film a frank discussion of personality will be encouraged. Students will learn to understand themselves better and see how they can improve their own personalities. How personalities can be developed and controlled is dramatically told. (Sr. High)

IMPROVE YOUR PRONUNCIATION (CORONET)

10 minutes—sound $1.80 3

Bill formulates a program for improvement using these basic rules: 1) pronounce every syllable, 2) pronounce each sound correctly, 3) use accepted pronunciations and 4) use natural pronunciation. (Jr. High through Adult)

IMPROVE YOUR READING (CORONET)

10 minutes—sound $1.80 3

This is a prescription for reading deficiencies. The three most prevalent ailments found among students—narrow perception span; rapid, careless reading; and the slow, ponderous pointing to and pronouncing of words—are presented in this film. Specific remedies for each are illustrated and a cure suggested. Students will readily apply the proper care for their own deficiency. (Jr. and Sr. High)

IMPROVING YOUR POSTURE (CORONET)

10 minutes—sound $1.80 3

Why should so many suffer poor posture when good posture is easy? Here's a very effective film answer. It shows the major areas of the body by which posture is controlled . . . demonstrates what good posture is: a balance of opposing sets of muscles . . . and teaches methods of maintaining good posture. Stressing relaxation, self-diagnosis and correction this film will help every student to overcome his individual posture faults rapidly. (Jr. and Sr. High)

IN COMMON CAUSE (USDA)

20 minutes—sound $1.20 2

Shows what soil conservation districts have accomplished, how they are formed and operated, and the big job yet to be done in this program for increasing crop production and saving soil. (Jr. High through Adult)

Unit Value

IN DAILY BATTLE (NatFdInfantPar)

26 minutes—sound $1.20 2
The members of a country chapter of the National Foundation for Infantile Paralysis take part in this story of how a chapter aids infantile paralysis patients and utilizes community facilities in the fight against the disease. (Jr. High through Adult)

IN THE NAME OF FREEDOM (UNC)

20 minutes—sound—color $1.20 2
The story of Chapel Hill and the University of North Carolina from its founding. (Sr. High through Adult)

INDIA (MOT)

12 minutes—sound $1.80 3
Viewing realistically past British imperialism, the film contrasts both sides of a land where tradition has placed Oriental luxury side by side with squalor. While picturing the substantial social improvements and industrial developments which Britain brought about in India, it also recognizes abuses which occurred simultaneously. (Jr. High through Adult)

INDIA—Farmers of India (UWF)

20 minutes—sound $3.00 5
In this film we learn that life in densely populated, underdeveloped lands is marked by great poverty, crowded living conditions, and often famine and disease. Although India is a land of natural riches, most of her people live in great poverty. The common farmer has only a few crude tools with which to work. (Elementary through Adult)

INDIVIDUAL DIFFERENCES (McGRAW-HILL)

23 minutes—sound $3.00 5
The case study of a shy, slow child who is different from his classmates and from his older, socially-adept brother. Points out that individual differences must be met in terms of individual interests and capabilities, that it is the job of the school to shape education to individual needs. (College and Adult)

INDUSTRIAL PROVINCES OF CANADA (EBF)

11 minutes—sound $1.80 3
Shows the development of the various industries of Canada, which include fur, lumber, mining, fishing and agriculture. (Elementary through Adult)

INDUSTRIAL REVOLUTION (EBF)

11 minutes—sound $1.80 3
Describes efforts of primitive man to do work chiefly with his own and animal muscles; compares methods of work from the time of the first steam-powered loom. Animated photography describes the mechanical advantage of machines. Cause and effect relationships are treated and their social and economic implications noted. (Jr. High through Adult)

INSECT ZOO (EBF)

10 minutes—sound—color $3.60 6
Portrays in full color Ted's and Susan's zoo comprised of insects

Unit Value

. . . katydid, cricket, butterfly, milkweed bug, larybird beetle, ants, and a praying mantis. Reveals characteristics of insects in general and shows by means of close-up photography the distinguishing features of each insect portrayed. Depicts simple homes which can be made for insects in an exhibit and suggests that young audiences plan an insect zoo of their own. (Primary and Elementary)

INSIDE THE WHITE HOUSE (TFC) **(See regulations—last page)**

10 minutes—sound $1.80 3

Views of both the exterior and interior of the White House. We see how thoroughly the credentials of newspapermen and other important personages are checked before they are admitted to the President's private office. (Elementary through Adult)

INSTALLMENT BUYING (CORONET)

10 minutes—sound $1.80 3

Young Dr. Harris badly needs new furniture for his waiting room, but cannot pay cash. His experience dramatically demonstrates some of the pitfalls of installment buying, and encourages a complete investigation of installment credit, contracts and interest rates. Your students will learn to ask themselves three questions before buying on credit: 1) Is the article worth buying on installment? 2) Can I afford it? and 3) Am I getting the best installment terms? (Jr. and Sr. High)

INSTRUCTIONAL FILMS: THE NEW WAY TO GREATER EDUCATION (CORONET)

15 minutes—sound $1.20 2

This film analysis demonstrates how audio-visual teaching saves time in presenting complex ideas, saves money by bringing costly equipment right into the classroom, makes the most distant things as near as the classroom movie screen and makes the student see familiar objects in a new light. The importance of proper selection, integration and administration of an education-film program under an audio-visual director is also stressed. (College and Adult)

INSTRUMENTS OF THE ORCHESTRA (BIS)

20 minutes—sound $1.80 3

Dr. Malcolm Sargent comes out of the wings onto the stage where the London Symphony Oochestra is ready to play. He explains that an orchestra is made up of instruments which are blown, scraped, or banged. Using "The Variations and Fugue on a Theme of Purcell," as arranged by Benjamin Britten, the members demonstrate each instrument without losing the continuity of the music, and Dr. Sargent explains the essential likenesses and differences of the various instruments. Finally, he explains the form of the fugue and the entire composition is played by the orchestra. (Elementary through Adult)

INSTRUMENTS OF THE BAND AND ORCHESTRA: INTRODUCTION (CORONET)

10 minutes—sound $1.80 3

This is a series of five films designed to introduce the band and orchestra to students, and familiarize them with the instruments

Unit Value

of the groups. The Youth Orchestra of Greater Chicago and the Joliet Township High School Band are featured in the films. This is a general introduction to bands and orchestras, explaining the three sections of the band, the brasses, the woodwinds, and the percussions, and showing how the additional section of strings gives the orchestra its different sound. (Intermediate, *Junior High*, Senior High)

INSTRUMENTS OF THE BAND AND ORCHESTRA: THE BRASSES

10 minutes—sound $1.80 3

We hear the distinctive sound of the brass section, showing how this section contributes to the full sound of bands and orchestras. After explaining, in animation, the basic principle on which brasses operate, we are musically and visually introduced, one at a time, to the cornet, the trumpet, the French horns, the trombones, the baritone, the tuba, and the sousaphone. (Intermediate, *Junior High*, Senior High)

INSTRUMENTS OF THE BAND AND ORCHESTRA: THE PERCUSSIONS (CORONET)

10 minutes—sound $1.80 3

We see the importance of the percussions in both bands and orchestras, and are introduced to the most common of the many percussions that are used. We hear, and see played, the bass drum, snare drum, field drum and tympani, or kettle drums; the cymbals, temple blocks, castanets, and gong; claves, marimba, bells and including the sock cymbal of dance bands; the tambourine, triangle, and chimes. (Intermediate, Junior High, Senior High)

INSTRUMENTS OF THE ORCHESTRA: THE STRINGS (CORONET)

10 minutes—sound $1.80 3

The section that is peculiar to orchestras is analyzed in this film. We see the basic principles of operation of the string instruments, and show, in simple analysis, how string instruments are played. The instruments that we see and hear are: the violin, viola, cello, and string bass (also called the bass viol, or double bass, or contra bass); we are shown several types of bows, and see and hear various musical effects obtainable from the instruments; the harp is shown as a regular member of the string section, and the piano is presented as one which can be included in that section. (Intermediate, *Junior High*, Senior High)

INSTRUMENTS OF THE BAND AND ORCHESTRA: THE WOODWINDS (CORONET)

10 minutes—sound $1.80 3

The woodwinds produce the interesting, colorful sound in bands and orchestras. We see how the woodwinds are held and played, hear their distinctive sounds, and learn the principle of which the woodwinds operate. The basic woodwind instruments introduced are: the flutes and the piccolo; the single reeds, including the clarinets and saxophone; and the double reeds, including the oboe, and alto oboe (English horn), and the bassoon. (Intermediate, *Junior High*, Senior High)

Unit Value

INTERIM REPORT (NATIONAL FOUNDATION FOR INFANTILE PARALYSIS)

15 minutes—sound $1.20 2

A documentary film with dramatic highlights in the history of Polio and the Salk Vaccine, narrated by John Daly. Sequences include Georgia Warm Springs, Franklin D. Roosevelt's home on Campobello where he fell ill, laboratory scenes made possible by March of Dimes grants to scientists, Dr. Jonas E. Salk conducting early tests on the vaccine, the vaccine evaluation center at the University of Michigan, and the patient care program. (Jr. Sr. High through Adult)

INTRODUCING THE WOODWINDS (Ind. U.)

23 minutes—sound $4.80 8

Describes and illustrates the musical characteristics and operating principles of the instruments of a woodwind quintet. Members of the New York Woodwind Quintet introduce a young audience to the flute, piccolo, bassoon, oboe, clarinet, and the French horn. Four compositions are performed to demonstrate the voices of the various instruments. Music includes Milhaud, The Hunting Scene; von Weber, Rondo in Hungarian Style; Moussorgsky, Ballet of the Unhatched Chickens, and Reicha, Movement from Quintet in E flat, opus 88, No. 2. Introductory remarks by Yehudi Menuhin.

INTRODUCTION TO BIOLOGY (EBF)

13 minutes—sound $1.80 3

This motion picture provides an excellent overview of the field of biology for prospective students and beginners. The film graphically explains the life processes, adaptation and reproduction; and it depicts ways in which biology is applied to such problems of daily life as combatting disease and controlling insect pests. (Jr. High)

INTRODUCTION TO CHEMISTRY (CORONET)

10 minutes—sound $1.80 3

Here is a film designed to stimulate an interest in the study of chemistry as well as provide important classroom instruction. Beginning with a clear-cut definition of chemistry, the motion picture introduces some of the important terms and materials common to the subject. Then some of the major industrial applications of chemistry are presented along with everyday uses found in the home and on the farm. (Jr. and Sr. High)

INTRODUCTION TO ELECTRICITY (CORONET)

10 minutes—sound $1.80 3

A basic knowledge of electricity's principles is a modern essential. Beginning with curiosity about static electricity around them, David and Marilyn investigate current electricity as well. They learn about electrons, and how the natural repulsion of these tiny negative particles makes electricity with chemicals and with magnetic lines of force. (Jr. High)

INTRODUCTION TO FOREIGN TRADE (CORONET)

10 minutes—sound $1.80 3

To appreciate the complex aspects of modern foreign trade, cer-

Unit Value

tain basic concepts and procedures should be understood. To help accomplish this goal, the motion picture first establishes the importance of foreign trade to our economy and then presents a general picture of the mechanics of international commerce. The role of monetary standards and control, national policies in reference to those controls, distribution of raw materials and markets are shown. Then, in an actual exchange of goods, the detailed domestic and foreign operations involved in the sale, shipment and payment are portrayed. (Jr. and Sr. High)

INTRODUCTION TO FRACTIONS (JOHNSON-HUNT)

10 minutes—sound—b&w $1.80 3
10 minutes—sound—color $3.60 6
This film follows a single concept of fractional meaning. By means of skillful three-dimensional animation of models and examples, taken from the everyday experiences of the child, it maintains a high degree of pupil interest. It covers the subject matter area of: What is a fraction; How is a fraction written; The meaning of numerator; The meaning of denominator; How to determine the value of a fraction. (Elementary)

INTRODUCTION TO HAITI (OIAA)

9 minutes—sound—color $1.80 3
An educational and entertaining trip to Haiti with its wealth of historical material, its colorful people and its unusual traditions. (Jr. High through Adult)

INTRODUCTION TO PHYSICS

10 minutes—sound $1.80 3
This film shows the main divisions of physics, provides a basic vocabulary for the study of physics and illustrates some of the important concepts of physics. It is excellent as a guidance film for those who are planning their requirements in science, and it also provides a stimulating introduction to those who are studying physics. Stress is laid on the importance of understanding everyday problems. (Jr. and Sr. High)

IRELAND (MOT)

16 minutes—sound $1.80 3
Gilmpses of the proverbial Irish national character; the poetic landscape of the country, and the political, economic and social problems which are being, and are to be, dealt with. (Jr. High through Adult)

IRISH CHILDREN (EBF)

10 minutes—sound $1.80 3
Charmingly reveals some of the characteristic activities of a typical Irish farm family. Deals especially with the young brother and sister at play and as they help other members of the family with household and farm chores. Follows the whole family as they go on Saturday to the bog turf to enjoy a family picnic. (Primary through Jr. High)

IRON ORE TO MOTIVE POWER (FORD)

28 minutes—sound $1.20 2
This film shows a modern foundary in operation and deals pri-

Unit Value

marily with the smelting, refining and conditioning of iron ore. Shown too, is the actual pouring of castings and the cleaning, grinding and machinery operations. Every step and operation necessary to transform raw materials to finished motor blocks is explained in detail. (Sr. High through Adult)

IRRIGATION—A Brief Outline (USDA)

15 minutes—silent $1.20 **2**

A Bureau of Agricultural Engineering film covering the important points in irrigation. (Jr. High)

IRRIGATION FARMING (EBF)

11 minutes—sound $1.80 **3**

Shows man's ingenuity in using the resources of nature to make usable and profitable a land that would otherwise be arid and desert. Engineers harness the water which begins with melting snow; farmers use the water by various methods of irrigation such as the pipe, the canvas, and the ditch methods. (Elementary through Sr. High)

IRVING, WASHINGTON (EBF)

20 minutes—sound $2.40 **4**

Delightfully brings to life significant episodes in the life of Washington Irving, the first American to receive prominent recognition in the world of literature. Traces Irving's early life in New York as a lawyer and then as a writer. Describes his travels and life abroad, highlighting the incidents on which hinged the writing of his best known literary works. (Jr. High through Adult)

ISRAEL—Building a Nation (UWF)

20 minutes—sound $3.00 **5**

In Israel are contrasted the subsistence farming with antiquated tools, which continues in some semi-arid regions with the new settlements where irrigation and mechanized farming are producing excellent crops. (Elementary through Adult)

IT CAN'T LAST (OWI)

18 minutes—sound $1.20 **2**

The story points out that precisely because the last battle of the war seems almost in sight, we must fight, work and save even harder. The last blow in the fight is the one that makes the decision stick. It points out that it's just as hard to die at the end of a war as at the beginning—perhaps even harder. (Jr. High through Adult)

IT TAKES EVERYBODY TO BUILD THIS LAND (EBF)

21 minutes—sound $2.40 **4**

Against a unique background of modern folk ballads sung to guitar accompaniment this film traces the development of specialization in American industry and agriculture. It explains why specialization is profitable and important to us, and graphically shows that we all depend on specialists for food, clothing and shelter. Particular emphasis is given to interdependence in farming, tool making, fishing, clothing, manufacturing and lumbering. (Elementary and Jr. High)

Unit Value

ITALY (MOT)

17 minutes—sound $1.80 3
This is the story of modern Italy with emphasis on the chaotic condition of that vanquished nation at the end of the conflict. Also incorporated is an absorbing sequence of Vatican City, politically independent capitol of the Roman Catholic World. (Jr. High through Adult)

ITALY—PENINSULA OF CONTRASTS (EBF)

17 minutes—sound—color $4.80 8
Skillfully depicts the physical geography of Italy and illustrates ways in which it influences the lives of the people. Contrasts old-fashinoned and up-to-date methods of farming and transportation; portrays ancient and modern aspects of Italian cities; reveals the fertile and barren regions; and highlights the importance of the tourist trade to the people of Italy. (Upper Elementary and High School)

ITALY—Po River Valley (UWF)

20 minutes—sound $3.00 5
The broad fertile land of the Po Valley, protected from cold winds by the high mountains which surround it and provide it with abundant hydro-electric power, makes an ideal area for the homes of almost half of the Italian people. This film is a picturization of the development of many large cities and industries fostered by the abundance of cheap electric power and skilled labor. It also presents a delightful contrast in the analysis of daily life in the village of Rivolta d' Adda, a farming community. The religious nature of these Italian farmers is highlighted by showing how each phase of the waking hours of the people is marked by the tolling of the bells in the local church tower. (Elementary through Adult)

ITALIAN CHILDREN—Harvest Time in Umbria (EF)

10 minutes—sound $1.80 3
Depicts activities in the daily life of farm children in the province of Umbria. Portrays interesting features of their home environment such as their house, garden, and food, and shows the children participating in the farm work—particularly in the picking and processing of olives. Illustrates the role of family festivities and musical enjoyment in the lives of Italian children, and features market day activities in the historic Italian city of Assisi. (Primary and Elementary)

ITALIAN PENINSULA (CORONET)

10 minutes—sound $1.80 3
Within the boundaries of the Italian Boot is a country of unusual geography. The cool climate of the north, the Mediterranean climate of the south, the twin coastlines, the "backbone" of mountain ranges have helped to produce different types of agriculture and living patterns. (Jr. High through Adult)

IT'S A TREE COUNTRY (AM. FOR. PROD.)

13 minutes—sound $1.20 2
Gives an objective, up-to-the-minute account of the many advances in forest fire prevention, tree farming, research and utilization

Unit Value

wood-using industries and timberland owners are making around the United States. (Junior and Senior High through Adult)

IT'S A WOMAN'S WORLD (HWO)

8 minutes—sound $1.20 2

After centuries behind the veil, Egypt's women have come to the fore. Here we see student, teachers in mass calisthenics as they toughen body as well as mind for the future job of teaching in Egypt's 8,000 elementary schools—girls studying agricultural subjects, Egypt's leading woman attorney in a dramatic court action, and girl internes assisting an actual operation in Cairo's great King Fuad Hospital. (Jr. High through Adult)

IT'S ALL YOURS (POCKET BOOKS)

11 minutes—sound $1.20 2

Designed to encourage teen-age audiences to read and own books, the film stars Ralph Bellamy in a story which takes him back to his youth, to all the familiar spots—the fields where he played ball, the stores, the stream where he fished, and the library. And as he looks back over his career he realizes the benefit and pleasure which books have brought to his life. (Elementary through Adult)

IT'S EVERYBODY'S BUSINESS (US CHAMBER OF COMMERCE)

22 minutes—sound $1.20 2

This film explains how our business system, built on a firm foundation of freedoms, has given America the highest standard of living in the world. It dramatizes the dangers to our personal, political and economic freedoms, and emphasizes the importance of protecting these freedoms. (High School, College, and Adult)

IT'S THE MAINE SARDINE (USF&W)

18 minutes—sound—color $1.20 2

Documentary film of the Maine Sardine Fishery showing the colorful methods of capturing and processing sardines. (Elementary through Adult)

IT'S YOUR AMERICA (OWI)

35 minutes—sound $1.20 2

Jeff is just another soldier thrown into the maelstrom of world conflict, uncertain, bitter, sorry for himself. But through his adventures, both comic and dramatic, he learns that "Liberty," "Freedom," "Justice" and "America" are more than words. By using the dramatic device of Jeff's luck-piece, a Lincoln penny, the audience is permitted to follow the course of the deep changes that take place in his mind. (Elementary through Adult)

JACK'S VISIT TO COSTA RICA (CORONET)

10 minutes—sound $1.80 3

This film field trip to Costa Rica emphasizes the bond of world brotherhood which exists between your students and their Latin American neighbors. They will go to a Costa Rican school, visit cocoa and coffee plantations and a balsa mill . . . share a vivid, worthwhile experience with Jack, our youthful traveler. (Jr. High)

JACKSON, ANDREW (EBF)

20 minutes—sound $2.40 4

Unit Value

Portrays important episodes in the life of America's seventh president. Re-enacts significant experiences of Jackson's boyhood; depicts highlights of his military career; traces major events of his years as president. Reveals the spoils system, and explains his attack on the United States Bank. (Jr. High through Adult)

JANE EYRE (TFC) (See regulations—last page)

40 minutes—sound $4.80 8

Jane Eyre, an orphan, undergoes the torments of a pauper as a child in the home of her aunt and in the school to which she is sent. She eventually becomes a governess in the home of Mr. Rochester, a brooding, melancholy person. As she is about to marry him, she discovers that he has a mad wife chained in the tower of the house where Jane has been serving. Later in a fire, the wife is killed, Rochester is blinded, and Jane at last has the opportunity to marry her lover. (Sr. High and College)

JAPAN—Island Nation (UWF)

20 minutes—sound $3.00 5

The country of Japan illustrates the geographic principle that living is difficult in an area where farmland and other resources are limited. By working hard and developing industry, densely populated countries can overcome some of their difficulties. (Elementary through Adult)

JAVA—Tropical Mountain Land (UWF)

20 minutes—sound $3.00 5

The picture places you in Java at a bustling, modern seaport where you board a train that links every phase of Java's economy; you understand why fifty million people can earn a living on an island the size of New York state. The film is focused on four men of a train crew. Their route is from coastal plain to mountain slope; from urban to rural scenes; from people employed in industrial activities to simple farmers. At the end you know Java: A tropical land, its fertility constantly replenished by volcanic ash, provides abundantly for a large population. (Elementary through Adult)

JEAN AND HER DOLLS (EBF)

7 minutes—sound—color $1.80 3

Familiar childhood activities, and pleasant home and family relations at once capture the interest of every primary grade youngster seeing this film. Designed to motivate reading, the film holds the attention of boys as well as girls as it tells the amusing story of young Frank who plays a trick on Jean and Betty while they are playing with their dolls. (Primary)

JEFFERSON, THOMAS (EBF)

20 minutes—sound $2.40 4

Presents a dynamic and vivid portrait of Thomas Jefferson the statesman, the diplomat, the man of letters and the progressive farmer. Points out this greatness as author of the Declaration of Independence, as Governor of Virginia, as Secretary of State, as Minister to France, as Vice President and President of the United States, and finally as "Father of the University of Virginia." (Jr. High through Adult)

Unit Value

JERRY PULLS THE STRINGS (AC)

38 minutes—sound $1.20 2
This story deals with the activities and achievements of two young people. The major portion consists of a series of puppet plays. A portion of the film shows a modern coffee-packing plant in operation. (Elementary through Adult)

JERUSALEM, THE HOLY CITY (EBF)

10 minutes—sound—color $3.60 6
Concentrating on the historic settings and contemporary shrines of the respective religions, this film develops the theme of Jerusalem as a city sacred to the Jewish, Christian and Mohammedan faiths. Settings and structures rich in historic associations pass in review to the accompaniment of an especially prepared musical score and interpretive narration. (Jr. High through Adult)

JOAN AVOIDS A COLD (CORONET)

11 minutes—sound $1.80 3
The story of a boy who violated the rules of good health and caught cold, and of a girl who followed the rules and didn't. Told in terms that young children can understand. The need for cooperation of teachers, parents, and school health authorities is stressed. (Primary and Elementary)

JOHN DOE, Citizen (BAILEY)

15 minutes—silent $1.20 2
Dramatizes a small city election, illustrates indifference of average citizen to public affairs and emphasizes that if the government is not run by the people the government will run them. Death of a child is tragic means of startling voters into recognizing individual political responsibilities. (Jr. High through Adult)

JOHNNY APPLESEED: A LEGEND OF FRONTIER LIFE (CORONET)

15 minutes—color—sound $4.80 8
In this film the inspiring story of Johnny Appleseed—a man of peace whose goal in life was to make the world a better place for all living creatures—is imaginatively retold against the background of pioneer America. We see how Johnny's love of God and nature started him on a mission that was to last all his life and make his name known throughout the land. (Primary, Intermediate, Junior High, Adult)

JULIUS CAESAR (EASTIN)

18 minutes—sound $1.80 3
Depicts the Forum scene which follows the assassination of Caesar. (Jr. High through Adult)

JUMPS AND POLE VAULTS (EBF)

11 minutes—sound $1.80 3
Advantage is taken of the techniques of slow motion photography for purposes of detailed study of form. Includes demonstration of the running high-jump, running broad jump, hop, step and jump, the pole vault. (Jr. High through College)

JUNIOR CITIZEN (GATEWAY)

20 minutes—sound $3.00 5
This film shows graphically how our school children are guided year by year from the beginning, first learning to play and work

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together, then to appreciate the many cultures that contribute to our civilization, then, as they develop and their capacities grow, to understand, appreciate, and gradually assume the responsibilities of community life, to value and learn to help in conserving our natural and human resources, and to earn a living in a congenial occupation. Threaded through the film, unobtrusively, yet with the eloquence of a great sermon, is the heartening conviction that all races and all creeds can live and work together, in an atmosphere of respect, friendship and understanding. (Jr. High through Adult)

JUNIOR HIGH SCHOOL STORY, THE (CFI)

27 minutes—color—sound $4.80 8

This is a story about junior high schools, whose function is to provide a special educational program for youth in grades 7, 8, and 9. This three-year educational segment is an American creation. This film gives an overview of the junior high school curriculum, in a pictorial review of existing programs in 49 of California's Junior High Schools. It is hoped that this film will inspire a critical analysis of existing offerings. (Adult-College)

JUST WHAT IS GENERAL SEMANTICS? (Ind. U.)

27 minutes—sound $4.80 8

Indicates that in the broadest sense general semantics is concerned with the factors in communication that lead to misunderstanding, tension, and conflict. Dr. Lee's specific interest is in the kinds of things that happen between people that produce trouble because of the way they talk. Reviews Alfred Korzybski's formulation of general semantics. Stresses and illustrates evaluations of situations which are stupid and those which are sensible in terms of resultant behavior. Suggests that by analyzing patterns of talk we can begin to understand and prevent unrealistic behavior. (College and Adult)

KANGAROOS (EBF)

11 minutes—sound $1.80 3

Provides an excellent camera study of the characteristics, habits, and ecology of Kangaroos. Shows how they live from the time they are born, what they eat, how they behave in their natural environment in Australia, who their enemies are and how they defend themselves. (All Ages) (Animals)

KEEP UP WITH YOUR STUDIES (CORONET)

10 minutes—sound $1.80 3

Importance of doing school assignments regularly is stressed in this film and a system of developing orderly work habits is presented. Your classes will gain skill, interest and motivation for better preparation of daily assignments from the film. (Jr. and Sr. High)

KENTUCKY PIONEERS (EBF)

11 minutes—sound $1.80 3

Shows representative aspects of the early pioneering movement into Kentucky territory. This is the life of our country in the 1780's, picturing travel along the Wilderness Road, the role of the frontier forts, and the settlers' establishment of new homes. Weaving, soap-making, cooking, candle molding, carpentry, cabin

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construction, schooling and square dancing are among the activities of the home. (Elementary through Adult)

KIDNAPPED (TFC) (See regulations—last page)

42 minutes—sound $4.80 8
Condensed version of the photoplay based on the book of the same title. (Jr. and Sr. High)

KIDS MUST EAT (USDA)

15 minutes—sound $1.20 2
Setting is a school room with Quiz Kids and the Quiz Master, Joe Kelly acting as "Teacher." He plies his brilliant class with questions, and receives some interesting answers. Among other things we learn that there are 30 million school children in America, a lot of whom are hungry because they are not properly fed. Sometimes it is "hidden hunger." There is plenty of food in America, but sometimes it is unevenly distributed. This results in surpluses and some of this surplus could be utilized in school lunches if citizens will get together and work out a practical plan for sponsoring a community school lunch program. The Department of Agriculture offers to help communities pay for part of the food by reimbursing local sponsors 9 cents for the Type "A" lunch, or 7 cents for the Type "B" lunch, or 2 cents for the milk that children always need. Examples of the lunches appear magically before the Quiz Kids, revealing complete, delicious, well balanced meals. Communities will learn how to get a similar program started in their own schools. (Primary through Adult)

KING BASKETBALL (OSFS)

26 minutes—sound ..... per day $2.00
Depicts the playing court—chart showing dead and live ball rulings —fouls by offense, by defense—try for goal—rebound—jump ball —free throw—team control—dribble—palming—pivot—screen—restricted areas—out-of-bounds; basket interference—3 second rule—division line. (Jr. High through Adult)

KING COTTON (JH)

19 minutes—sound $2.40 4
The film opens with scenes of cotton fields and cotton picking as a choir sings Negro spirituals. The development of the cotton gin is traced, by comparing Eli Whitney's first crude model to the gigantic modern cotton gin of today. The story of cotton unfolds in a panorama of modern farming, science and industry. The use of cotton fibers for fabrics, linters for lacquers and plastics, and cotton fabrics for tires is shown. We also see cotton being used in the building of highways. (Elementary through Adult)

KING MIDAS & THE GOLDEN TOUCH

10 minutes—sound $1.80 3
The ancient fable of the king who coveted gold has been translated here into a delightful motion picture. The objectionable features of the original story which prevented many teachers from using it in the classroom have been avoided in this film presentation. (Primary and Elementary)

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KITTY CLEANS UP (YA)

10 minutes—sound $1.80 3

A film made especially for the lower grades, telling the story of a small girl, Helen, and her pet cat. Helen arises in the morning, and bathes, dresses and eats, in preparation for taking Kitty to the Pet Show at school. The camera catches the actions of the cat which closely parallel those of Helen in washing and eating. Designed to stimulate language activities revolving around pets and personal health habits. (Primary)

KNOW YOUR LIBRARY (CORONET)

12 minutes—sound—color $3.60 6

Some students find a library a bewildering place. In this film they will learn the overall organization of a typical high school library, how to use the card catalogue, the principles of the Dewey Decimal System, arrangements of the books on the shelves, and how to use such supplementary materials as the encyclopedia, the Reader's Guide and the vertical file (Elementary and Jr. High)

LA FAMILIA SANCHEZ (EBF)

11 minutes—sound $1.80 3

A visit with a rural family in Southern Spain with emphasis on the activities of the children. (Same story as the film, SPANISH CHILDREN, but told in simple and slow-paced Spanish). (Sr. High through Adult)

LA PAZ (OIAA)

20 minutes—sound $1.20 2

A journey through La Paz, Bolivia's capital and the "highest big city in the world." Here the ancient is blended with the modern to make a fascinating study of the contrast between the old and the new Latin America. (Elementary through Adult)

LADY MARINES (OWI)

20 minutes—sound $1.20 2

Interesting details of the indoctrination period are shown. Adequate provisions are made to maintain the health of the girls. This indoctrination period at Camp Lejeune, N. C., involves drilling and marching; review and inspection and actual demonstration that shows the real meaning of war. Stimulating social life and recreational opportunities of all kinds. (Jr. High through Adult)

LADY OF THE LAKE: BACKGROUND FOR LITERATURE (CORONET)

10 minutes—sound $1.80 3

One of the most widely read poems of "The Great Romantic," Sir Walter Scott, comes to life in this beautiful film. This motion picture teaches the concept that literature has its roots in actual places, people and events by providing a brief background of the author's life and by giving visual meaning to the poem's vocabulary in showing the actual background in the Scotland that is its setting. (Jr. and Sr. High)

LAKE CARRIER (OWI)

8 minutes—sound $1.20 2

A film of the Great Lakes ore boats and their part in winning the

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war. It shows how iron ore is mined, and how the lake carriers feed it to the mills that forge the vital steel for victory. (Elementary through Adult)

LAND OF LIBERTY: Growth of America (TFC)

Each reel 20 minutes—sound
Reel 1 Colonial Period—1805 ..... $2.40 4
Reel 2 1805-1860 ..... $2.40 4
Reel 3 1860-1890 ..... $2.40 4
Reel 4 1890-1938 ..... $2.40 4
Epitomizes more than a century and a half of American history. Composed of sequences from 112 different feature pictures and shorts plus newsreels. The story of men and women who struggled to attain and defend American liberties. (Jr. High through Adult)

LAND OF MEXICO (EBF)

11 minutes—sound $1.80 3
Chiefly a factual outline of the physical aspects of the country and of the nation's agricultural and market places. (Elementary through College)

LAND OF THE BUBBLING WATERS (NFB)

13 minutes—sound—color $1.20 2
Mineral hot springs in the Canadian Rockies provide a pleasure bonus to all who vacation in this scenic area of the Canadian west. Long known to the Indians for their healing properties, the mineral waters today form the focal point of many fine resorts. In the film, a vacationing family from the Pacific Coast discovers the refreshing effect of these natural pools. They also visit the Miette Pool in Jasper National Park and come down down through Banff to enjoy the Cave, Basin and Upper Hot Springs. (Jr. High through Adult)

LANGUAGE OF GRAPHS (CORONET)

14 minutes—sound $2.40 4
Types of graphs, their uses and values are presented here to help students understand and appreciate the graph method of presenting statistical data. Bar, line, circle and equation graphs are woven into a story to show how these and other graphic representations can be used. (Jr. and Sr. High)

LANGUAGE OF MATHEMATICS (CORONET)

10 minutes—sound $1.80 3
A practical application of mathematical terms showing how mathematics is fundamental to our society and to every phase of modern living. Students see "in action" the precise and meaningful symbols of mathematics. They learn how this unique language helps them to state—and solve—problems more rapidly and accurately. A review of the use of graphs, measurements and numerical operations is presented in the conclusion. (Jr. High through Adult)

LAPLANDERS (EBF)

11 minutes—sound $1.80 3
The story of the reindeer-tending Laplanders of northern Sweden. Follows a family from their summer fishing grounds to the highland reindeer pastures where the winter work of slaughtering and

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preparing the year's food supply is carried on. Portrays the dependence of the Lapps on the reindeer for food, clothing, shelter and transportation. (Elementary—social studies)

LAST DAY OF AN ENGLISH QUEEN, THE (YA)

27½ minutes—sound $3.00 5

Civil war threatens in England in July, 1553, between supporters of Lady Jane Grey, named to succession by the Council of Regents, and supporters of Princess Mary Tudor, claimant to the throne. Jane is only sixteen and has been Queen for nine days, while Mary's support has increased. Jane speaks of her mixed emotions; Mary states her moral position. Mary reveals her love for Spain. The Council of Regents argues, then decides that Jane must be executed. Her father, Duke of Suffolk, brings her the news. (Junior High through Adult)

LATITUDE AND LONGITUDE (UWF)

10 minutes—sound $1.80 3

Interpretation of latitude and longitude as angular distances from given points, rather than as imaginary lines. The use of latitude and longitude to determine a position is indicated. Film technique has been used to show sections of the globe, thus demonstrating the relation between angles subtended at the center of the globe or at the axis and linear distance on the surface of the globe, also to show the connection between lines of latitude and longitude and angles subtended in the interior of the world. (Jr. High through Adult)

LAW & SOCIAL CONTROLS (CORONET)

10 minutes—sound $1.80 3

Whether demonstrated on a world-wide basis or in a relatively minor incident, the nature of law and social controls remains basically the same. Using a situation which will be clearly understood by every student, the three broad areas of social control are established: customs, local, state, national, etc. This picture will help to develop an understanding of the law and a sense of responsibility toward it. (Jr. and Sr. High)

LAYING THE ATLANTIC CABLE (KB)

11 minutes—sound $1.80 3

Scenes aboard a cable layer from Newfoundland to the Azores. Explains depth sounding and shows how a telegraphic cable is constructed and held. (Elementary through Sr. High)

LEADERS FOR LEISURE (AI)

20 minutes—sound—color $1.20 2

This is a film designed for community recreation leaders, pointing out the importance of good leaders for the success of such a recreation project for any community. (Sr. High through Adult)

LEARNING ABOUT ELECTRICITY (EBF)

10 minutes—sound $1.80 3

Designed to establish understanding of basic concepts of electricity—What is an electric current? What are conductors? What is an electric circuit? How is electricity used in daily living?

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LEARNING ABOUT HEAT (EBF)

10 minutes—sound $1.80 3

Presents basic concepts about heat—what heat does to materials; how heat causes expansion and contraction of materials; what are good and poor conductors.

LEARNING ABOUT LIGHT (EBF)

10 minutes—sound $1.80 3

Deals with such fundamental concepts as when are objects luminous; what objects are transparent, translucent, and opaque; what is reflection and what is refraction.

LEARNING ABOUT SOUND (EBF)

10 minutes—sound $1.80 3

Whether loud or soft, high or low, sound is made by vibration and travels in waves. We are aware of sound because the vibrations reach our ears and the hearing nerves carry their message to the brain.

LEARNING AND GROWTH (EBF)

10 minutes—sound $1.80 3

Attempts to clarify some of the principles which govern the learning process. The possibilities and limitations of training infants from twenty-four to forty-eight weeks of age are described. Learning problems are analyzed with special age, growth and learning are indicated. Laws which determine learning in older children are pointed out. (College and Adult)

LEARNING FROM CLASS DISCUSSION (CORONET)

10 minutes—sound $1.80 3

A good, lively class discussion is not only interesting and thought-provoking but it can be a vital part of everyday school work. This film stresses the value of properly phrased questions that stimulate thought and lead to new avenues of discussion within the major question. An *attitude of discovery* is cultivated by three rules from a stimulating discussion: *prepare in advance, take part and keep an open mind.* (Jr. and Sr. High)

LEARNING TO STUDY

14 minutes—sound $2.40 4

As a score of students enter a high school library for study period, the film introduces the question of the importance of learning to study. The scene shifts to a classroom, where a social studies teacher explains that learning is basically a change in behavior resulting from one of three things: the acquisition of new knowledge, the development of new skills, or a change in attitudes. Basic steps are setup for easier and more effective learning, both in formal study and daily out-of-school experiences. (High School)

LEARNING TO SWIM (YA)

10 minutes—sound $1.80 3

A young 12-year-old Australian boy demonstrates the Australian crawl, proceeding in easy-to-understand steps for the beginning swimmer. Produced in Australia. Recommended for Elementary and Junior High School; Sports and Recreation. (Elementary and Jr. High)

Unit Value

LEARNING TO UNDERSTAND CHILDREN, PART I (McGRAW-HILL)

21 minutes—sound $2.40 4

Presents a case study of Ada Adams, an emotionally and socially maladjusted girl of 15. It records the efforts of her English teacher to study her case sympathetically, to understand her and to plan remedial procedures to help her. Shown in detail are the diagnostic techniques, such as observation of the child's behavior, study of her previous records, personal interviews, home visitation and formulation of a hypothesis for remedial measures. (College and Adult)

LEARNING TO UNDERSTAND CHILDREN, PART II (McGRAW-HILL)

21 minutes—sound $2.40 4

A continuation of the case of Ada Adams. Her teacher develops a plan for remedial action. (College and Adult)

LEATHER WORK (G)

10 minutes—sound $1.80 3

Demonstrates the making of a coin and key purse. A number of articles are displayed; and a few of the most popular types of leather are discussed. Produced under the supervision of Edward T. Hall, of the Universal School of Handicrafts, New York. (Jr. High through Adult)

LEAVES (EBF)

10 minutes—sound $1.80 3

The film first suggests the significance of leaves to all life forms. Then animated drawings are employed to show the relationship of plant leaves to the other parts of a plant—roots, stems, and flowers. There is a rapid survey of several common types of leaves and essential parts of the typical leaf. Throughout the body of the film microscopic views reveal cross-section of leaves, thereby showing the arrangement of the leaf parts and the process of the leaf. Animation is used to explain photosynthesis. In conclusion, the film reveals plant structures which are essentially modified leaves. (Elementary through College)

LEE, ROBERT E. (CORONET)

15 minutes—sound—color $3.00 5

Lee is studied first as a Virginian, a devout Christian who was forced to decide between his home and the Union he loved; then, as a brilliant strategist and beloved commander who stood for "cause, country, and all"—a man whose integrity of principle, even in defeat, set an example for the New South and for future generations of all the nation. (Jr. High through Adult)

LEGEND OF THE PIED PIPER (CORONET)

10 minutes—sound $1.80 3

"Keep your word" is the theme audiences will find in this famous fairy story of the master musician of Hamelin. Both classes and informal groups will enjoy this film for its entertainment value as well as for the background understanding of the story which will be important to them in later reading. (Primary and Elementary)

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LET MY PEOPLE LIVE (TB)

15 minutes—sound $1.20 2

A simple, dramatic and deeply moving story of a family of southern Negroes in which the mother succumbs to an advanced form of tuberculosis. The daughter upon advice from the minister consults a doctor and finds that she too has the disease, but with the proper rest and care is eventually cured. The brother finds that his body was able to withstand the disease. Chorus of colored singers give background music. (Jr. High through Adult)

LET'S ALL SING TOGETHER (LF)

11 minutes each (Order by number—2 units each)

No 1 Daisy, Daisy; Old MacDonald Had A Farm; Home On The Range; Alouette $1.20 2

No 2 Oh, Susanna; Carry On; Short'nin' Bread; Pack Up Your Troubles $1.20 2

No 3 Put On Your Grey Bonnet; The More We Are Together; The Daring Young Man On The Flying Trapeze; Carry On $1.20 2

No 4 My Wild Irish Rose; En Rouland Ma Boule; Clementine; I've Got Sixpence. (Elementary through Adult) $1.20 2

LET'S BE CHILDISH (AFFlms)

20 minutes—sound $1.20 2

In this charming film, set against backgrounds of the ice-capped French Alps, the children of all the countries of Europe teach a lesson in international cooperation that adults might well profit by. Working together to build a snow city, they win a prize more valuable to them than anything they might have gotten through individual enterprises. (Elementary through Adult)

LET'S BE SAFE AT HOME (PORTAFILMS)

10 minutes—sound $1.80 3

Stresses the desirablity of developing safe attitudes by always remembering to be alert, careful, courteous and considerate. The children are shown coming home from school. Then five episodes follow. In each case the narrator stops the children just as their attitude is likely to cause an accident and shows them what might happen, which is visualized by faint, double-exposed images of the children. (Primary through Adult)

LET'S COUNT (CORONET)

10 minutes—sound $1.80 3

This film will fill the gaps between the haphazard counting of youngsters in the primary grades and their introduction to arithmetic. As they watch Sally and Joe, they'll see how useful counting can be. They'll learn the difference between ordinal and cardinal numbers, and how easy it is to use tallymarks and numerical symbols to answer the question, "How Many?" (Primary)

LET'S DRAW WITH CRAYONS (CORONET)

10 minutes—color—sound $3.60 6

How to use, how to care for, and how to store crayons, and some of the many interesting effects one can achieve through different crayon techniques make this dramatic film a rich art lesson. The motion picture stresses creative drawing, poster-making,

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and numerous other crayon crafts, such as imprinting a crayon design on cloth. (Primary, *Intermediate*)

LET'S PAINT WITH WATER COLORS (CORONET)

10 minutes—sound—color $3.60 6

The correct use of water colors can present many problems. Children often spill their paints, misuse their colors, and ruin their paint brushes. This film is intended to help the average teacher of elementary art overcome some of these problems and to encourage her children to do creative work in water colors both at school and at home. (Elementary)

LET'S PLAY FAIR (CORONET)

10 minutes—sound $1.80 3

Sharing, taking turns, obeying rules, are some of the basic elements of fair play that Herbie and his brother Bill discover in this inspirational motion picture. Your students will realize through this film that, although it sometimes takes careful consideration, fair play is the way to have the most fun. (Primary and Elementary)

LET'S PLAY WITH CLAY: Animals (YA)

10 minutes—sound $1.80 3

An introductory film on clay work. Demonstrates the general character of clay, how to handle it, how to keep it smooth, how to keep it from breaking, and how to obtain a satisfactory finish. Shows how to make such simple forms as a bird, pig, rabbit, fish, cat and snowman—all by means of hand operations. (Primary, through Jr. High)

LET'S PLAY WITH CLAY: Bowls (YA)

10 minutes—sound $1.80 3

A sequel to the above film, but designed to be used as an independent unit. Begins with rolling a piece of clay between the hands to make a ball, then shows how this can be worked by hand into variety of shapes—a teacup, saucer, cream pitcher, sugar bowl, and several decorative bowls. (Primary, through Jr. High)

LET'S PRONOUNCE WELL (CORONET)

10 minutes—sound $1.80 3

This film shows youngsters from 8 to 14 years old how good pronunciation can be achieved by some simple practices . . . . being clear, being natural, and being accurate in word usage. The story concerns Tom who lacked good speech habits. The audiences, aware of his failings, and aware of the methods he uses to correct himself, will find themselves pronouncing words with him, and by silently correcting him as he goes along, will be able to apply what they see on the screen to their own pronunciation problems. (Elementary)

LET'S SHARE WITH OTHERS (CORONET)

10 minutes—sound $1.80 3

Sharing is an important social concept that involves a series of skills. This motion picture outlines these skills and teaches an important lesson based on fair play, cooperation, thoughtfulness, courtesy and friendship. It includes such behavior patterns as dividing things, taking turns, sharing through words and ex-

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pression and doing things together. The inherent or natural limitations of sharing are illustrated but the new values and pleasures that come with sharing are emphasized. (Primary)

LET'S VISIT A POULTRY FARM (CORONET)

10 minutes—sound $1.80 3

A poultry farm is a unit of an important American agricultural industry; it's a complex business in itself, and it's a fascinating place for youngsters to visit. So—let's visit a poultry farm and take your students along. They'll feed the chickens with the farmer's son, and gather and package the eggs. And at the hatchery they'll watch breathlessly as a baby chick pecks his way out of his shell. Here's a field trip on film they'll enjoy and long remember—and with a new understanding of the poultry farmer's contribution to us all. (Primary)

LET'S VISIT SCHOOL LIBRARIES (STATE DEPT. PUB. INST.)

22 minutes—sound—color $1.00

Presented here are the school libraries of North Carolina, the various practices of both the elementary and secondary schools and the importance of the libraries to the school children. This is a vividly pictured presentation. (Jr. and Sr. High, College, Adult)

LETTER TO GRANDMOTHER (CORONET)

18 minutes—sound $2.40 4

We follow Mary's letter to Grandmother through every hand that it passes. We watch postal employees collect, cancel, sort and dispatch the mail, accompany her letter on the railway mail car and see it to its destination, delivered by an R.F.D. carrier. When Grandmother answers Mary with a package, we return with it to learn about the handling of parcel post. (Primary, through Jr. High)

LEWIS AND CLARK (EBF)

20 minutes—sound $2.40 4

Tells the story of the expedition made by Meriwether Lewis and William Clark to explore the land from the Mississippi to the Pacific Coast. Follows their party up the Mississsippi River to Manden Indian territory in North Dakota where they established winter camp. Portrays their meeting with the Frenchman Charbonneau and his Indian wife Sacajawea who became their guides. Continues with them across the northern Rockies and down the Columbia River to its mouth. Reveals details of scientific exploration with respect to topography, natural resources, and plant and animal life. (Jr. High through Adult)

LIBRARY ORGANIZATION (CORONET)

10 minutes—sound $1.80 3

High school and college students are expected to have a certain basic knowledge of the organization of the libraries they use, but this basic knowledge is not enough for really efficient use of the library. As this film shows, a more detailed understanding of organization speeds up work in the library and makes for better use of study time. By explaining the card catalogue system and the Dewey Decimal System in use in one typical library, the

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film provides students with the means for making their library a treasurehouse of information. (Jr. and Sr. High)

LIFE ALONG THE WATERWAYS (EBF)

11 minutes—sound—color $3.60 6

Beautiful photography depicts the many forms of plant and animal life found near the streams, ponds, rivers, and marshes that make up a waterway system. Illustrates the dependence of the members of this community on the waterway, and points out their activities throughout the spring, summer and autumn season. Indicates physical changes of the waterway in the growth from brook to river. (Elementary and Jr. High)

LIFEBLOOD OF THE LAND (USDA)

20 minutes—sound—color $1.20 2

Shows that water and life itself depend upon forests. Demonstrates through animation how rainfall affects forested and deforested slopes, why forests and cover crops are essential to an adequate water supply, what can be done by planting new trees, terracing and seeding hillsides, and avoiding too heavy grazing. (Jr. High through Adult)

LIFE CYCLE OF THE MOSQUITO (YA)

10 minutes—sound $1.80 3

A film describing the life cycle, structure, and feeding habits of the mosquito. Live action plus animation is used to show the anatomy of the mosquito egg, the larval and pupal cases. (Jr. High through College)

LIFE IN A DROP OF WATER (CORONET)

11 minutes—sound $1.80 3

This film stresses these basic themes (1) basic necessities of animal life; (2) simplest forms of plant and animal life; (3) colonial forms of simple animal life. The various single-celled forms are shown in relation to their environment, meeting the minimum problems of all life, and the relative advantages of colonial over individual life. (Elementary through Sr. High)

LIFE IN A POND (CORONET)

10 minutes—sound—color $3.60 6

Pond life is presented "in action" here showing students microscopic animals, food-chains and a wealth of plant and animal life that provide examples of important principles of natural science. The film blends natural setting scenes and controlled set-ups with a wide variety of underwater and microscopic scenes. Seen is a typical fresh-water pond as a home of a self-sustaining group of plants and animals. Among these are green plants—shoreward, floating and submerged plants. Then the abundant animal life is seen—water fleas, beetles, insect larvae, dragonfly, nymphs, and minnows. (Elementary, through Sr. High)

LIFE IN AN AQUARIUM (YA)

10 minutes—sound $1.80 3

Shows the setting up of a classroom aquarium stocked with goldfish, snails and tadpoles. Explains how fish breathe under water; that all animals need oxygen. Shows the difference between lungs

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and gills; how fish use their tails and fins for locomotion; the stages of the development of the frog from the tadpole; and explains how the snails move about and protect themselves. (Primary and Elementary)

LIFE IN HOT DRY LANDS—CALIFORNIA (CORONET)

10 minutes—sound $1.80 3

In a land devoid of rain all forms of life must struggle to survive. This film tells the story of the fierce battle of survival waged by the starving plant life, the animals and human beings of the desert who adapt themselves to this grim existence. Your students will learn where the desert areas of the world are located . . . will learn why they are barren wastelands. (Jr. and Sr. High)

LIFE IN HOT WET LANDS—CONGO BASIN (CORONET)

10 minutes—sound $1.80 3

This film tells the story of how climate influences the lives of people in hot, wet lands. Set in the Congo Basin, the picture provides an authentic account of the life of a jungle boy and his family. It shows how people adapt their clothing, shelter, social activities and food gathering to the geographic region in which they live. (Elementary)

LIFE IN NORTHERN LANDS (NORWAY) (CORONET)

10 minutes—sound—color $3.60 6

A Norwegian farm family, living on a fiord near Bergen, shows us how people in a northerly latitude adjust their lives and seasonal occupations to the demands of climate and topography. We see this family first harvesting hay and grains during the short Norwegian summer, and again in the winter, when the children ski to school and their brother and father are occupied with the fishing fleet and forest products. (*Intermediate*, Junior High)

LIFE IN THE LOWLANDS—NETHERLANDS (CORONET)

10 minutes—sound $1.80 3

Peter and Mina are very excited! Grandfather is going to show them how so much of their country was claimed from the sea and made into rich polders or farm land. After meeting this typical Dutch family the camera takes us on an exciting tour of The Netherlands. (Elementary)

LIFE IN MOUNTAINS—SWITZERLAND (CORONET)

10 minutes—sound $1.80 3

Taking a six-month seasonal span, this film offers a fascinating study of the conditions and adaptations to living in mountainous regions. It brings to your class a background for study of Switzerland in pictorial form that enriches units from the low elementary grade through adult groups. (Elementary)

LIFE IN OLD LOUISIANA (EBF)

10 minutes—sound $1.80 3

Portrays representative aspects of Louisiana and its key city, New Orleans, during the years of Creole dominance. (Elementary through Sr. High)

Unit Value

LIFE INSURANCE OCCUPATIONS (AM. LIFE INS.)

10 minutes—sound $1.20 2
This film is designed for presentation to all vocational guidance classes. It gives accurate descriptions of many of the career opportunities offered by life insurance home offices. (Sr. High through Adult)

LIFE IN THE DESERT (EBF)

11 minutes—sound—color $1.80 3
The type of weather encountered in desert countries is discussed; the heat, the winds that drive dust and sand, the bitter cold of night, the day after waterless day. Time-lapse photography shows us why approaching rain clouds fail to supply water to the desert; we actually see the effect of rising currents of warm air on the clouds that dissipate at the desert's edge. We see streams dry up in the sandy desert floor, and dry waterholes, mud-cracked in the intense sunlight. The film highlights the adaptation of animal and plant life to the conditions around it. (Elementary through Sr. High)

LIFE OF A PLANT (EBF)

10 minutes—sound—color $3.60 6
Clearly shows steps in the life cycle of a typical flowering plant, the pea. Identifies the roles of roots, stems, leaves, flower, fruit, and seed. Live-action shots are dramatized through the medium of time-lapse photography. Animated drawings reveal the functioning of the various parts of the plant. (Elementary and Jr. High)

LIFE ON A FRENCH FARM (CORONET)

10 minutes—sound $1.80 3
There is probably no better way to reach a real understanding of another people, another nation, than to live for a little while with a typical family in their home surroundings. That is exactly what your students will do as they watch this film. They'll meet the Duvals, go about their daily tasks with them and learn how we are like them. (Elementary)

LIGHT & SHADOW (YA)

10 minutes—sound $1.80 3
This is an introduction to the nature and behavor of light. Demonstrates how light rays are reflected and explains such terms as *luminous, transparent, translucent, and opaque.* (Elementary)

LIGHT WAVES AND THEIR USES (EBF)

10 minutes—sound $1.80 3
This elementary presentation of light includes a comprehensive explanation of the principles of reflection with plane, concave and convex mirrors. Refraction is clearly revealed in connection with the lenses and with special reference to the human eye. The principles and applications of interference are vividly portrayed. This is followed by interesting sequence on polar screens, the electromagnetic spectrum, and the quantum theory. Animation is employed extensively to visualize otherwise intangible processes. (Jr. High through College)

Unit Value

LIMA (OIAA)

17 minutes—sound $1.20 2

The beauties of Peru's capital city, the City of Kings and the colonial capital of the Spanish empire in the Western Hemisphere. The rich historical background is sketched, and the modern life of the city is pictured against the background of many beautifully preserved colonial palaces and buildings. (Elementary through Adult)

LIMA FAMILY (OIAA)

20 minutes—sound $1.20 2

A day in the lives of the members of one of the upper-class families of Lima, the capital of Peru. We see a cultured, modern, happy group of people not unlike those in the same class in the United States. There are differences though, and these make an interesting film. (Elementary through Adult)

LIMESTONE CAVERNS (CORONET)

10 minutes—sound—color $3.60 6

The Cave of the Mounds at Blue Mounds, Wis. serves as the locale for this exposition of the phenomena of formation of caves and caverns. The physical and chemical action of water and atmosphere on strata and deposits are illustrated by the formation and growth of stalactites, stalagmites, spattercones and oolites. (Primary through Adult)

LINCOLN, ABRAHAM (EBF)

20 minutes—sound $2.40 4

Dramatically re-enacts incidents in Lincoln's life which characterize him as an outstanding exponent of human freedom. Traces interesting events of Lincoln's early boyhood which reveal his unforgetable qualities of integrity, humor, common sense and tenderness. Points to his several roles as store clerk, woodsman, lawyer, husband, father, congressman and President, (Jr. High through Adult)

LITERATURE APPRECIATION: ENGLISH LYRICS (CORONET)

10 minutes—sound $1.80 3

The lyrics of Tennyson, Keats, Wordsworth, Shelley, Shakespeare and other English immortals as translated here through the medium of the motion picture will give students a new appreciation and understanding of the poet's works. The best in lyric language is presented here against the actual English scenes as the poets saw them . . . the Shropshire country as Alfred Housman knew it; the surf at Dover Beach where Matthew Arnold walked; the magic of an English spring as Robert Browning dreamed of it from abroad. (Jr. and Sr. High)

LITERATURE APPRECIATION: HOW TO READ NOVELS (CORONET)

15 minutes—sound $2.40 4

Here is a provocative study of several aspects of the fascinating process of reading a novel. For enrichment and greater appreciation of novels, this film encourages students to find out about the author, to study charactarizations closely, and to visualize the setting and action of the story in order to gain pleasure in

Unit Value

novel reading and to give improved oral and written book reports. (Junior High, *Senior High*, College)

LITERATURE APPRECIATION: HOW TO READ POETRY (CORONET)

15 minutes—sound $1.80 3

Enjoying poetry is dependent in part on being skilled in reading poetry. In this film your students will discover how understanding the poet, looking for experiences the poet is sharing, and recognizing word devices used to convey the experiences will increase their pleasures in reading poetry. (Junior High, *Senior High*, College)

LITERATURE APPRECIATION: STORIES (CORONET)

13 minutes—sound $2.40 4

This film will increase the interest of students in the appreciation and enjoyment of great literature. They will learn how to approach stories for a better understanding, how to interpret the various types of styles of stories and how to develop an appreciation of the fine stories which have been written. (Jr. and Sr. High)

LITTLE RED HEN (CORONET)

10 minutes—sound—color $3.60 6

This film retells the famous fable of a little red hen in a charming combination of art and live action. The technique is unique, but to the teacher the value of the film lies in the common class experience it offers, the vocabulary development and the interest it excites in all language activities. (Primary)

LITTLEST ANGEL (CORONET)

13 minutes—sound $3.60 6

To the gates of Heaven came a small and very lonely little angel who though he tried to look and act like a good little angel should, just couldn't seem to stay out of trouble. Then one day, the kindly old Understanding Angel granted the Littlest Angel's wish and from that day on, the cherub's conduct and appearance were above reproach. Finally came the time when Jesus was to be born. All the angels of Paradise busied themselves with the preparation of their costly gifts. Yet it was the gift of the Littlest Angel that was chosen by God to shine as an inspiration for all men. (Primary through Adult)

LIVE TEDDY BEARS (The Koala) (EBF)

10 minutes—sound $1.80 3

Portrays the life and habits of the Koala, a strange and fascinating animal of Australia. Discloses the Koala first in a park and then in its native habitat, the Australian bush country. This charming film relates the story of a Koala family—father, mother, and a baby called Teddy. Explains clearly the adaptation of the Koala to its environment, especially in relation to food supply. (Primary and Elementary)

LIVESTOCK AND MANKIND (USDA)

11 minutes—sound $1.20 2

Tells how veterinary science has helped to increase the usefulness of domestic animals to mankind. (Sr. High and College)

Unit Value

LOCUS (KB)

12 minutes—sound $1.80 3

By a combination of animated drawings, regular photographic motion and the spoken word, the entire concept of locus is clearly visualized and explained. This is a film which will prove the advantages of audio-visual instruction in mathematics. (Sr. High and College)

LONGFELLOW, HENRY WADSWORTH (EBF)

20 minutes—sound $2.40 4

Charmingly portrays salient and representative events in the life of Longfellow—events which make secure his unique place in the world of literature. Describes his early love for poetry and his growing full life as teacher, scholar and poet. Interposes selections from his poems and depicts incidents which inspired him to write several of his best known works. (Elementary through Adult)

LOOK WHO'S DRIVING (UNITED PRODUCTIONS OF AMERICA)

8 minutes—sound $1.20 2

An animated portrayal of Charlie Younghead, an emotionally immature driver. Illustrates how a loss of self-control and bad driving can lead a driver to do things he would never do when emotionally calm. Stresses the importance of good judgment and courtesy when driving. (Sr. High, College, Adult)

LOON'S NECKLACE (EBF)

10 minutes—sound—color $3.60 6

Brings to life a charming Indian legend of how the loon, a water bird, received his distinguishing neckband. Authentic ceremonial masks, carved by Indians of British Columbia, establish the characters of the story and clearly portray the Indian's sensitivity to the moods of nature. Rich color photography, delightful narration, and effective background music make this a thoroughly charming film. (Elementary through Sr. High)

LOUISIANA PURCHASE, THE (EBF)

16 minutes—sound $2.40 4

Brings to life an important incident in United States history. Recreates not only the issues of the times but the heated passions which motivated the men who made history.

LUBRICATION (SINCLAIR)

30 minutes—sound $1.20 2

Describes theory of friction and practical application of lubricants to various mechanical elements connected with our everyday life. Displays range of petroleum lubricants and their use in various operations. Shows how lubrication reduces work, wear, and waste, and conserves materials. (Sr. High through College)

MACBETH (EASTIN)

16 minutes—sound $1.80 3

Presents the Murder and Sleepwalking scenes from the famous play. (Jr. High through Adult)

Unit Value

MACHINE MAKER (EBF)

10 minutes—sound $1.80 3
The setting and personnel of a machine tool factory. Demonstrates the operation and manufacture of lathes, millers, planers, drill presses, boring mills, grinders, and other machines. (Sr. High through Adult)

MADE IN USA (RNR)

10 minutes—sound $1.20 2
In a typical American store a group of people discuss economic problems, the discussion reaches the point of argument on the interdependence of the different countries. This interdependence is clearly illustrated when one member of the group drives away in his car and pieces fall off and he is left with only the steering wheel—which, of course, is no good without the other parts. (Jr. High through Adult)

MAGIC BULLETS (OWI)

30 minutes—sound $1.20 2
The dramatic story of Dr. Paul Ehrich's struggle to conquer the microbe causing syphilis and of how he finally found a solution which effectively combats the microorganism. (Jr. High through Adult)

MAGNETISM (EBF)

16 minutes—sound $3.00 5
Discusses the laws of polarity, the magnetic field, and terrestrial magnetism. Through its effective treatment of elementary magnetism, the film leads to an understanding of atomic fields. Shows a variety of modern applications of magnetism and the important role of magnets in our technological civilization. (High School)

MAGNETS (YA)

13 minutes—sound $1.80 3
This film teaches a few simple basic facts about bar magnets. Temporary and permanent magnets are explained to Betty and Bob by their father. Betty and Bob learn that like poles repel and unlike poles attract each other; that a suspended bar magnet acts like a compass needle; that a plain bar of steel can be magnetized and made into a bar magnet; that the magnetic force of a magnet will go through such things as glass and paper. (Elementary)

MAILMAN (EBF)

10 minutes—sound $1.80 3
Suggests the importance of mail in our lives especially to a sick child. Follows town and rural letter carriers on daily rounds. Shows how a mailman sorts and delivers incoming mail and picks up outgoing mail. Shows why the rural mailman's car is called a "post office on wheels." Rural carrier delivers letters and packages, and sells money orders and stamps, accepts and weighs parcel post packages, etc. Shows how mailmen go out in all kinds of weather. Emphasizes aspects of mailman's relation to mail service. He performs an efficient routine. (Primary through Jr. High)

Unit Value

MAIN STREET MERCHANT (ASSOCIATION FILMS)

40 minutes—sound $1.20 2
Follows the life of a young man who rises to an executive position in a large department store. (Senior High through Adult)

MAINTAINING CLASSROOM DISCIPLINE (McGRAW-HILL)

14 minutes—sound $2.40 4
Explores the fundamentals of proper control of class conduct and attitude. Contrasting methods of handling a class are demonstrated. (College and Adult)

MAJOR RELIGIONS OF THE WORLD (EBF)

20 minutes—sound—color $3.00 5
This film presents an objective survey of the origins, rituals and symbols of the major religions of the world today—namely, Hinduism, Buddhism, Judaism, Christianity, and Mohammedanism. Designed to help inspire an appreciation for, and a tolerance of, the principal religious faiths held by most of the world's people. (High School and Adult) (Social Studies)

MAKE WAY FOR DUCKLINGS (WestonWoods)

11 minutes—sound—color $3.60 6
The picture book classic by Robert McCloskey. Inconographic filming with original music score by Arthur Kleiner.

MAKE WAY FOR THE QUEEN (MOT)

23 minutes—sound $1.20
Preparation for the coronation of Elizabeth.

MAKE YOUR OWN DECISIONS (CORONET)

10 minutes—sound $1.80 3
Making decisions is a skill that everyone should learn as a prerequisite to more mature and successful living. Failure to make decisions often leads to worry and even ill health. This film presents a series of five questions that illustrate the alternatives that exist in every situation and shows how each contributes to making a self-reliant and a psychologically mature individual. (Jr. and Sr. High)

MAKING BOOKS (EBF)

10 minutes—sound $1.80 3
Traces each important step in the manufacture of books—from author's manuscript to completed book. Reveals how type is first set by linotype; how it is locked into page form; and how electroplates are made. We then see how the sheets are printed, cut, folded, and bound; how covers are made and attached; and how each book is finally enclosed in a bright-colored jacket. (Primary and Elementary)

MAKING COTTON CLOTHING (EBF)

10 minutes—sound $1.80 3
Tells the story of a child's cotton print dress from the designing of the original to the pressing and packing of hundreds of dozens of garments in a modern mass production garment factory. Hand

Unit Value

methods are contrasted with quantity production technique. (Elementary through Sr. High)

MAKING ELECTRICITY (EBF)

11 minutes—sound $1.80 3

Provides a fascinating demonstration of how electricity is made by moving a coil of wire through the field of a magnet. Explains first how a small, hand-powered generator is constructed and how it operates; then illustrates how the same principle applies in generating electricity at a large hydro-electric plant. Reveals finally how electricity is carried over power lines to the consumer. (Elementary)

MAKING ELEMENTS

29 minutes—sound $4.80 8

A team of scientists reenact their synthesis, isolation, and identification of element 101, Mendelivium. Shows and demonstrates methods and special equipment used in handling radioactive materials. Presents film records of actual work related to the discovery and members of the discovery team participating in the film include Albert Ghiorso, Dr. Bernard Harvey, Thomas Parsons, and Dr. Stanley G. Thompson.

MAKING FRIENDS (EBF)

11 minutes—sound $1.80 3

Illustrates with a series of brief scenes various kinds of friendships. Three different high school students have friendship problems. The film describes how each student attempts to solve his problem. Points out definite qualities of friendship and ways of making friends.

MAKING OF A MURAL (EBF)

10 minutes—sound—color $3.60 6

Thomas Hart Benton makes a mural for a Missouri department store. All stages of preparation and work are shown, from the conference with a store president to the final mounting of the mural on the wall. Mr. Benton experiments first in rythmic designs to fit the oblong space. Developing a design based on a Greek myth, he sketches the layout, makes a clay model in order to get unusual lighting effects, makes a small painting from the model to determine the color combinations, uses live models to make larger clay models with all necessary details, makes an exact cartoon drawing of the entire design, transfers the design to the canvas, mixes the paints, does the actual painting, adds details and covers the entire canvas with wax. (Jr. High through College)

MAKING OF A SHOOTER (JAM HANDY)

30 minutes—silent—color $1.20 2

While the picture is primarily a safety film, it also represents in a most effective manner the recreational appeal and character building possibilities of hunting and other forms of shooting. It traces the development of a youngster under expert supervision, into a real sportsman with a full knowledge of how a gun should be handled safely and efficiently, and how he should conduct himself with firearms at all times. (Jr. High through Adult)

Unit Value

MAKING PAVING BRICK (USDA)

15 minutes—sound $1.20 2
The progress of clay is traced from the time it is taken from the deposit until it is made into the finished product. (Jr. High)

MAKING SENSE WITH SENTENCES (CORONET)

10 minutes—sound $1.80 3
Why should we use complete sentences when we write? Often we do not speak in complete sentences, yet we are understood. What is a complete sentence, anyway? These and other questions about "Complete thoughts" and how they are expressed are answered in this unusual film. (Elementary)

MAKING SHOES (EBF)

11 minutes—sound $1.80 3
Designed to show elementary school children how shoes are manufactured in modern American factories. It traces the entire process from cutting the leather through assembly of various parts of the shoe and final polishing and packing. One of a series of films to show children how modern technology affects everyday life. (Primary through Jr. High)

MALAY PENINSULA: THE LAND & THE PEOPLE (CORONET)

10 minutes—sound $1.80 3
Importance of this Asiatic peninsula to our economy is dramatized in this review of its economy and culture. Audiences will see the relationship of the hot, wet climate to the way the people of the Malay Peninsula live and how the people produce tin, rubber, tea and copra. This film shows the development of trading centers such as Singapore with its striking contrast between East and West. (Jr. and Sr. High)

MALAYA—Nomads of the Jungle (UWF)

20 minutes—sound $3.00 5
The moment this picture begins you experience the illusion of actual presence in a Malayan jungle and participation in the every-day life of a typical nomad family. You hear the chatter and laughter of care-free moments and you understand perfectly how these people plan their lives, anticipate their needs and meet their problems in relation to climate, environment, natural resources. This is background. The story centers upon the development of a boy approaching maturity and his preparation for adult responsibilities in which can be seen the same basic needs for skills and knowledge required of any child in any land. (Elementary through Adult)

MAMMALS ARE INTERESTING (EBF)

11 minutes—sound $1.80 3
Defines the concepts needed to understand the distinguishing characteristics of mammals. Includes striking close-up views of some forty different animals—from the one celled protozoa to the highly intelligent chimpanzee. Points out the differences between vertebrates and invertebrates, cold-blooded and warm-blooded animals; and classifies several well-known groups of mammals—the hoofed mammals and other plant eaters, the car-

Unit Value

nivora, the rodents, and the primates. (Elementary through Sr. High) (Animals and Biology)

MAMMALS OF THE ROCKY MOUNTAINS (CORONET)

10 minutes—sound $1.80 3

Moving up the mountain from the valley grasslands through the wooded slopes and alpine meadows to the barren heights, we see how animals typical of each mountain zone adapt themselves to the changing seasons. The film shows how the mountain goat, bighorn sheep, mule deer, marmot, porcupine, and others solve their particular problem of food supply. (Jr. and Sr. High)

MAMMALS OF THE WESTERN PLAINS (CORONET)

10 minutes—sound $1.80 3

Here the plant-eaters and meat-eaters of the plains illustrate the inter-relationship of the wildlife in any area. Striking action scenes of the animals in their natural habitat show how the buffalo, antelope, timber wolf, and others are fitted to find their food and to protect themselves. (Jr. and Sr. High)

MAN WHO KNOWS IT ALL, THE (Ind. U.)

28 minutes—sound $4.80 8

Considers the nature and consequences of the "disease of allness," an attitude present in the person who says or implies that what he knows about a thing is all that can be said. Shows that when "allness" exists, mental growth is inhibited and tension is likely to develop in our conversation with others. Suggests that the cure of "allness" is an awareness that more can be said. Argues that this awareness is the difference between a growing man and a bigot. (College and Adult)

MAN WHO MISSED HIS BREAKFAST (C)

28 minutes—sound $1.20 2

A story of nutrition. The Warren family and Uncle Bill—the man who missed his breakfast. Never, says Uncle Bill, has there been greater need for Americans to be strong, healthy and able to perform the jobs confronting each of us. We must eat properly, so that we have strength, energy and stamina to do these jobs. (Elementary through Adult)

MANAGING THE FAMILY INCOME (MOD)

38 minutes—sound $1.20 2

Is your family budget a bugaboo or a means of assuring comfort and joy? Budgets are more than a lot of figures on a piece of paper—not just numbers that jump and shout "no" every time you want to have a little fun. This interesting picture shows how an ordinary family makes a plan for spending their income. Recommended for arithmetic, home economics, social science, and other classes studying budgets. (Jr. High through Adult)

MANUAL TRAINING, ELEMENTARY (BRANDON)

10 minutes—sound $1.80 3

We see a youngster start with the plans and work to a polished finish, a gift box. He is taught to use the saw, plane, a veining tool, cleats, glue and nails. Produced under the direction of Edward T. Hall of the Universal School of Handicraft, New York. (Elementary and Jr. High)

Unit Value

MAPS ARE FUN (CORONET)

11 minutes—sound—color $3.60 6
Introduces the fundamental concepts of map reading—legend, scale, grid, types of maps, uses of color, how to read a map index, etc. An incentive and orientation film for intermediate grades. (Elementary and Jr. High)

MARINE ANIMALS & THEIR FOODS (CORONET)

8 minutes—sound—color $3.00 5
This film effectively demonstrates the interrelation of marine animals and their surroundings by showing various sea animals and the five general types of food on which they depend. Such common marine animals as the sea anemone, sea urchin, barnacle, and octopus are included. Special attention is devoted to specific adaptations of these animals for obtaining one or more of the main types of food. (Jr. and Sr. High)

MARITIME HOLIDAY (FBC)

16 minutes—sound—color $1.20 2
Shows the many experiences discovered by an American family who proceed by road and by sea to New Brunswick and Prince Edward Island and back via Cape Breton Island and Nova Scotia. The film highlights the many scenic attractions, the facilities for summer enjoyment. Some of the "believe it or not" natural wonders, and the thrills of sailing—all of which makes theirs a colorful and memorable holiday. (All age groups)

MARITIME PROVINCES OF CANADA (EBF)

10 minutes—sound $1.80 3
Located in the extreme southeastern part, the Maritime Provinces include three small provinces: the peninsula of Nova Scotia with Cape Breton Island on the Atlantic; Prince Edward Island in the Gulf of St. Lawrence; and New Brunswick. (Elementary through Adult)

MARRIAGE IS A PARTNERSHIP (CORONET)

15 minutes—sound $2.40 4
Too often today, young people regard marriage as a goal in itself. Under the influence of romantic fiction, they tend to believe that all it takes to "live happily ever after" is love. This motion picture sets out to establish a positive approach to the realities of marriage—to answer some of the major problems that arise during the first year of marriage; arguments, responsibilities, decisions, loyalties and other marital questions are raised and discussed in this film story. (Sr. Hgh)

MARY HAD A LITTLE LAMB (CORONET)

10 minutes—color—sound $3.60 6
Reenacted with real storybook flavor, the traditional poem about Mary and her lamb will enthrall primary-grade children. Through charmingly live-action style, the delightful story unfolds to create a background for reading, memorizing, singing and youthful art activities. (Primary)

MARY VISITS POLAND (IFF)

10 minutes—sound $1.80 3
Mary, an American elementary school girl, describes to her class

Unit Value

her experiences in visiting her grandparents in Poland. In her own language she takes her class into a Polish school, into Polish homes, and into fields where agricultural activities are seen. She shows them the beautiful costumes and colorful dances of the Polish people and gives her class an insight into the cities of Lowicz, Krakow, Zakopane, and Gdynia. (Elementary through Sr. High)

MASTER WILL SHAKESPEARE (TFC) (See regulations—last page)

10 minutes—sound $1.80 3
A brief story of the life of Shakespeare with special emphasis on his play "Romeo and Juliet." (Jr. High through College)

MATTER & ENERGY (CORONET)

10 minutes—sound $1.80 3
This film shows that everything in the universe is either matter or energy. Matter in its different forms, physical and chemical change, the laws of conservation of matter and energy, etc. are visualized by the sound and motion of real-life examples, supplementing expert laboratory demonstration. (Jr. and Sr. High)

MATTER OF TIME, A (ASSN F)

14½ minutes—sound—color $1.20 2
A progress report on medical science's fight against America's number one killer—heart disease. Describes the main types of heart disease and illustrates some simple rules of health for a longer, happier life. (Sr. High through Adult)

MEANING OF ENGAGEMENT, THE (CORONET)

15 minutes—sound $2.40 4
The engagement period should be an important step in preparing for a successful marriage. The function of the engagement period is to develop psychological unity, to learn to know each other, and to plan for the future. The film also discusses the delicate problem of "breaking an engagement" and when it is the wisest choice. (Senior High, College)

MEANING OF FEUDALISM (CORONET)

10 minutes—sound $1.80 3
Students are sure to get a new history experience when they see and study a feudal castle with Jacques, a French boy who lives in an ancient town below the castle. The film presents the physical elements, and more, it re-creates the flavor and spirit of feudal times. (Jr. and Sr. High)

MEANING OF LONG DIVISION (EBF)

10 minutes—sound $1.80 3
Explains simply and clearly the meaning of long division. Shows first that long division takes the place of a tedious succession of simple subtractions. Then, by means of unique animated diagrams, the film explains how the operation is shortened and simplified by grouping the subtractions. To further clarify the concept, two representative problems are solved graphically in animation. (Jr. and Sr. High)

Unit Value

MEANING OF PERCENTAGE (YA)

11 minutes—sound $1.80 3

Provides an introduction to the meaning of percentage by relating it to the student's previous understanding of fractions and decimals. (Elementary and Jr. High)

MEANING OF PI (CORONET)

10 minutes—sound $1.80 3

This film develops an understanding of this important mathematical ratio and outlines a study procedure by which the numerical value of pi can be checked and reviewed. In careful step-by-step procedure, the numerical value of pi is arrived at and sequences showing the use of circles in art, industry and commerce help to fix the value firmly in the student's mind. In a closing historical sequence, the discovery of pi is described as one of the great advances in history. (Jr. and Sr. High)

MEANING OF PLUS AND MINUS (EBF)

10 minutes—sound $1.80 3

Shows how the words "plus" and "minus" and their corresponding signs are associated with actions. That is, "plus" belongs with joining actions, while "minus" goes with separating actions. This association of symbol with action is made especially clear by this picture and provides sound basic understandings vital to later mathematical competence. (Primary)

MEANING OF THE INDUSTRIAL REVOLUTION (CORONET)

10 minutes—sound $1.80 3

For us today, living in an age of machines, the question of "How did this begin?" is necessary to an understanding of our times. With this film your students will discover answers to our own age, as they relive in England the 18th century revolution that was the change-over from hand tools to machines, from water power to steam power. From the quiet rhythm of the spinning wheel to the multiple whirring of Hargreaves' spinning jenny to the steady pulse of a Watt flywheel, your audience will see the exciting drama of industrial achievements that revolutionized Western civilization. (Jr. and Sr. High)

MEASUREMENT (CORONET)

11 minutes—sound $1.80 3

Don, a boy of twelve, encounters everyday situations involving measurements of the seven kinds treated in the film: linear, square, cubic, weight, liquid, temperature, time. The illustrations are simple ones, such as making a ball diamond, counting money, measuring a room, etc., but they highlight the importance of measurement to modern living and motivate the study of means and tools of measuring. (Elementary through Sr. High)

MEASUREMENT OF ELECTRICITY (CORONET)

10 minutes—sound $1.80 3

Don, concerned aobut overloading a household circuit, falls asleep while studying a book of electricity. In his dream, which follows, the four scientists, whose names have been adopted as the four basic units of electrical measure, speak to him from the book. This film teaches the fundamental definitions and the physical

Unit Value

concepts involved in . . . the Volt, Ampere, Ohm, and Watt. (Jr. and Sr. High)

MEATS WITH APPROVAL (USDA)

17 minutes—sound $1.20 2

The purpose of the federal meat inspection program and how it helps to assure wholesome, clean meat for the consumer. It shows the steps of inspection—from live animal through slaughter house and cannery, and tells how the meat inspection law came into being, how it is administered and what it means to the consumer in terms of health and safety. (Jr. High through Adult)

MECHANICAL APTITUDES (CORONET)

10 minutes—sound $1.80 3

A high school boy goes to the school counselor for help in choosing his electives. Sound guidance practices are demonstrated as the two work toward a decision based on the boy's interests, abilities, and future plans. Ways to test mechanical interests and abilities and to increase mechanical abilities are shown. (Jr. and Sr. High)

MECHANICS OF LIQUIDS (CORONET)

10 minutes—sound $1.80 3

As an introduction to hydrostatics, this film relates the subject to everyday objects around us by showing that water systems in our homes, in towns and on farms serve us because of definite scientific principles. Pascal's law of pressure on confined liquids is interpreted in terms of hydraulic machines; Archimedes' principle of buoyancy is translated in terms of swimming. Effective animation clarifies the teaching of the important points regarding the mechanics of free and confined liquids. (Jr. and Sr. High)

MECHANISMS OF BREATHING (EBF)

10 minutes—sound $1.80 3

The breathing mechanism in operation. Technical animation of gaseous exchange in lungs and body tissue cells, including pathological conditions. Demonstration of artificial respiration. Nervous control of breathing and factors affecting rate and depth of breathing. (Jr. High through College)

MEDIEVAL CRUSADES, THE (EBF)

27 minutes—sound $3.00 5

This film discusses the crusades that followed the first conquest; the film dwells on the innovations which the crusades brought to Western Christianity. Through contact with Eastern science, philosophy, and strategy, life at Montbref estate and all over Europe changed and widened the horizons of the medieval world. (Junior High, Senior High)

MEDIEVAL GUILDS, THE (EBF)

21 minutes—sound $2.40 4

To tell the story of guilds, the film creates a composite medieval community which can be studied from inception to final development. The film takes us to a master shoe-maker's shop, where we see the initiation of an apprentice; the everyday life of apprentice and journeyman; and a routine inspection by wardens of the guild. A series of colorful scenes offer glimpses of a meeting in the guild

Unit Value

hall, and of members enjoying themselves at a guild celebration. (Junior High, Senior High)

MEDIEVAL KNIGHTS, THE (EBF)

22 minutes—sound $2.40 4

A vivid dramatization of the education of a knight. In the year 1192, Robert de Goncourt comes to Montbref Hall to learn chivalry and fighting skills. At the age of seven, Robert begins learning behavior, dancing and music, reading, and Latin, and also horsemanship. At fourteen, Squire Robert learns fighting skills, and at twenty-one, he becomes Sir Robert, in the time-honored ceremony dubbing him knight. (Junior and Senior High)

MEDIEVAL MANOR, THE (EBF)

21 minutes—sound $2.40 4

This film shows how labor is divided in the fields and illustrates some of the daily problems in the village. The seneschal visits the village to demand separate donations for the wedding of the lord's eldest son. We see the preparation of food for the banquet and in the yard we watch the games played by the noble class of the Middle Ages. (Junior High, Senior High)

MEDIEVAL WORLD (CORONET)

10 minutes—sound $1.80 3

From the English-walled city of York, from the Flemish guildhalls of Ghent, from the French cathedral of Chartres comes the film framework of The Medieval World. Knights and feudalism, Chaucer's Pilgrims, castles and crusades—these words and ideas take on meaning and relationships in this exciting visualization of medieval times. (Jr. and Sr. High)

MEET YOUR FEDERAL GOVERNMENT

15 minutes—sound $1.80 3

For junior and senior high school studies, for the purpose of motivating and introducing a study of the structure and function of our federal government. Explains the powers of the federal government as well as the nature and function of each of the three main branches. (Jr. High through College)

MEETING THE CHALLENGE (B&O)

29 minutes—sound—color $1.20 2

The film shows modern scenes and gives a remarkable comprehensive survey of operations on the 6,000 mile B&O Railroad. Included are such shots are the operation of the great Curtis Bay Coal Pier and of the great new coal and ore docks of the B&O at Lorain, Ohio on Lake Erie. (Jr. High through Adult)

MEHALLA (HWO)

6 minutes—sound $1.20 2

At Mehalla, eighty miles north of Cairo, on the Nile River, an industrial miracle is taking place. Here, one of the world's greatest textile mills has been constructed and a "modern paradise" represents the last word in housing, recreations, and educational facilities for the 26,000 employees. It includes a library, cultural center, mosque, theater, swimming pool and schools. Over 1000,000,000 yards of fabric from Egypt's famous long staple cotton, is produced here annually. (Jr. High through Adult)

Unit Value

MELTING AND REFINING OF STAINLESS STEEL (BM)

23 minutes—sound—color $1.20 2

Shows operation of 50-ton electric furnace: charging furnace, lowering electrodes, striking electric arc, controlling current, adding oxygen to burn out impurities, slagging to protect steel, taking a sample, skimming slag, adding burned lime and flourspar, stirring the melt, sampling, laboratory testing, pouring ingots. Closes with a list of articles made of stainless steel. (Jr. High through Adult)

MEN OF GLOUCESTER (FORD)

20 minutes—sound—color $1.20 2

Portrays the Cape Ann section of Massachusetts, the scenes of the landing of the first white settlers in America early in the 1600's The picture shows the crew of a topline mackerel seiner actually hauling mackerel from the sea more than ninety miles off shore. (Elementary through Adult)

MENTAL HEALTH (EBF)

12 minutes—sound $1.80 3

Vividly defines good mental health, describes its attributes, and discusses its importance to the individual and to society. The film sets forth a series of simple, straightforward rules for "keeping mentally fit," and illustrates them with incidents from the lives of various members of a high school graduating class.

MEN WHO GROW COTTON (C)

21 minutes—sound—color $4.20 7

Opening with scenes of the color and gaiety of the Cotton Carnival in Memphis, this picture visualizes and emphasizes the dependence of the South upon cotton. Behind the romance of the carnival is the reality of growing and marketing cotton. Today, the men who grow cotton face competition from other industries and from industrial products in this country—rayon, nylon, and paper. They are meeting this competition by diversified farming, by soil conservation practices, by the cooperative buying of seed, equipment, and insecticides, by discovering new uses for cotton and cotton products, and by using new methods and new machines. Especially stimulating to the imagination are the possibilities of mechanization, and the film shows such modern developments as a flame cultivator which burns out weeds around cotton plants without harming the plant themselves, the spreading of insecticides by airplane, and the weird and slightly terrifying mechanical cotton picker. This film is recommended for both rural and urban audiences, for school and out-of-school use. (Jr. High through Adult)

MENU PLANNING (CORONET)

10 minutes—sound $1.80 3

Well balanced, attractive meals, planned to fit within a budget, are necessary for healthful family living. This film shows how one family learned how to apply four tests for good menu planning: Do the meals fit within the budget? Are the foods attractive to the family? Can the foods be prepared in the time available? Do the meals meet the dietary need of the familly? (Jr. and Sr. High)

Unit Value

METALCRAFT (EBF)

11 minutes—sound $1.80 3
Presents the steps taken by a master craftsman in making a pewter bowl by spinning and shaping a blank for later soldering to a cast base. The craftsman then creates a bronze bowl by raising, smoothing, annealing, planishing, and burnishing a blank disc. (Jr. High through Adult)

MEXICAN AGRICULTURAL PROGRAM (ASSOCIATION FILMS)

22 minutes—sound—color $1.20 2
Shows how soil management, irrigation, conservation, development of new crop varieties, pest control, and up-to-the-minute farm machinery have improved Mexico's agricultural output. The agricultural program described in the film began in 1943 as a joint undertaking of the Mexican government and the Rockefeller Foundation with the purpose of producing more high quality food with less labor. The successful results of the program are illustrated. (Sr. High through Adult)

MEXICAN CHILDREN (EBF)

10 minutes—sound $1.80 3
Reveals the home, school, and play life of two Mexican children, Aurora and Mateo. (Primary through Jr. High)

MEXICO BUILDS A DEMOCRACY (OIAA)

20 minutes—sound $1.20 2
Shows how Mexico is attempting to build its democracy by educating its people. How a young instructor in one village carried out his program of education for democracy. (Jr. High through Adult)

MEXICO CITY (OIAA)

11 minutes—sound—color $1.20 2
The cathedrals, modern hotels, and parks of Mexico are described by Orson Welles. There is a dance to the God of Fire and a fiesta in the capital. (Jr. High through Adult)

MEXICO: GEOGRAPHY OF THE AMERICAS (CORONET)

10 minutes—color—sound $3.60 6
Intimate glimpses of the farmers, miners, cattle ranchers, factory workers and city dwellers of Mexico, and the relationships of these occupations to the varied geography of their country are shown. These form the basis of this film designed to create a fuller understanding of the closest southern neighbor of the United States. Scenes on Mexican history and current affairs near the end of the film will stimulate further class discussions. (Intermediate, Junior High)

MEXICO VALLEY—Adobe Village (UWF)

20 minutes—sound $3.00 5
This film lesson vividly illustrates how areas colonized by Spanish peoples in the Western Hemisphere are characterized by much "blood-blending" and have developed a maize culture with life centered in the village, especially the church of the village. The central plateau of Mexico well illustrates this geographic principle. Here one finds a mixture of Indian and Spaniard blood (Mestizos). The peasants are seen practicing a maize culture

Unit Value

(mostly hoe culture). Their life is centered in the market town, and they are particularly close to their church. (Elementary through Adult)

MICROSCOPE & ITS USE (YA)

11 minutes—sound $1.80 3

A demonstration film explaining the basic parts of the microscope, its function, and its use. Explains thoroughly, step by step, the method of learning to operate and use the microscope properly. Attention is given throughout the film to proper care of the instrument. (Elementary through Sr. High)

MICROSCOPIC MYSTERIES (TFC) (See regulations—last page)

10 minutes—sound $1.80 3

Natural life habits and activities of certain insects—family of ants—a spider—and lions—grasshoppers—shell-backed bug—wasp scorpion—cricket—a tarantula attacks a cricket—mating scenes between black crickets—spider attacks a centipede. (Elementary through Sr. High)

MIDDLE EAST, THE: CROSSROADS OF THREE CONTINENTS (CORONET)

15 minutes—color—sound $4.80 8

The significance of being international crossroads, the scarcity of rainfall and water supply, and the importance of rich oil deposits are the three key ideas developed in relation to the countries of the Middle East. Their need for water and its effect on their economy is illustrated. A crossroads of peoples, historic cultures, and trade, the Middle East today has developed oil as a major resource. This valuable product has had an important effect on the relations of the Middle East with the rest of the world. (*Intermediate*)

MIDDLE STATES (EBF)

10 minutes—sound $1.80 3

Presents in sequential form an overview of man's use of resources in the states of Minnesota, Iowa, Missouri, Illinois, Wisconsin, Michigan, Indiana and Ohio. (Jr. High through College)

MIDSUMMER NIGHT'S DREAM, A: INTRODUCTION TO THE PLAY (CORONET)

15 minutes—sound $2.40 4

Key scenes from *A Midsummer Night's Dream* are staged. Familiar passages and significant actions are used to illustrate the setting in which the characters act, their relationships to one another, and plot of the play. Narrative exposition also clarifies the way and the language they speak. (Senior High, College)

MIDWEST USA—Cattle and the Corn Belt (UWF)

20 minutes—sound $3.00 5

In this film we learn how the people who live and work on the vast areas of level land, which constitute our midwestern plains produce large quantities of food for the people of the world and feed for livestock. In the western part, lands are used for grazing livestock which are later shipped eastward to the moister section of the central states commonly referred to as the Corn Belt. Here

Unit Value

a mixed type of agriculture is dominant. Cattle and hogs are fattened for market on the corn and other crops raised on the farm. As a result of these agricultural activities, the Central States have millions of people and many large cities. (Elementary through Adult)

MIGHTY COLUMBIA RIVER (CORONET)

10 minutes—sound $1.80 3

The largest North American river to flow into the Pacific shows all its force, vitality and beauty in these scenes. Put to work by Grand Coulee and Bonneville Dams, the Columbia displays itself as one of the world's greatest sources of hydro-electric power . . . a busy pathway of shipping traffic, a rich fishing bed for the salmon industry and a source of irrigation for the broad farmlands of the Northwest. (Jr. and Sr. High)

MIGHTY MUSKIE (NBC)

10 minutes—sound—color $1.20 2

Fishing for muskellunge, one of the gamest of fresh-water fish in Canada, is a sport that gets into a man's blood. On the teeming waters of northwestern Ontario and southern Quebec the camera closes in for a ringside seat as two fishermen match their strength and skill with that of the mighty muskie. Fish after fish is pulled in after savage struggle. Small ones are returned to the lake—and why not, when there are fifty-pounders waiting to test the fisherman's technique with rod and reel?

MILK (EBF)

10 minutes—sound $1.80 3

Presents the dramatic story of milk from the dairy farm to the table. Photographic sequences depict the use of milk in the home, the dairy herd, milking and the care of cows, and the pasteurization and bottling of milk in a modern plant. The use of machines is emphasized without stressing technical details. An important film for helping to acquaint children with our modern industrial society: for developing appreciation of the contributions of technology to home life. (Primary and Elementary)

MILLIONS OF CATS (WestonWoods)

10 minutes—sound—color $3.60 6

Wanda Gag's picture book classic presented through "inconographic" film technique, using text and pictures from the book. Original music score by Arthur Kleiner.

MIRACLE MONEY (AM. CANCER)

20 minutes—sound $1.20 2

Shows the activities and eventual exposure of a quack doctor who runs a private hospital and advertises a cure for cancer, with a dramatization of the police record. (Sr. High through Adult)

MISSOURI AND ITS NATURAL RESOURCES (BM)

33 minutes—sound—color $1.20 2

The minerals and other natural resources, raw materials, industries, and recreational facilities. Emphasizes the diverse resources and products of the state whose population is balanced almost evenly between urban and rural. (Jr. High through Adult)

Unit Value

MITTENS, THE KITTEN (CORONET)

10 minutes—color—sound $3.60 6

Creative expression is encouraged in this delightful story about a little girl and her kitten. Words such as *nursing, drink, play, whiskers* and *climb* are matched to scenes defining their meaning and children are aided in verbalizing their experiences with kittens and other animals. (*Primary*)

MODERN ALCHEMY

29 minutes—sound $4.80 8

Dr. Seaborg and his associates describe the discovery of the four "missing elements," technitium, astatine, Francium, and Promethium. Emphasizes the role of the cyclotron in the creation of synthetic elements. Dr. Earnest O. Lawrence explains the operation and development of high voltage accelerators from the first eight inch cyclotron to the mammoth betatron. Dr. Emilio Segre, a participant in the discovery of the first synthetic element, describes and demonstrates the technique used by him to identify astatine.

MODERN BASKETBALL (OSFS)

28 minutes—sound ..... per day $2.00

Interpretation of the basketball rules demonstrated by skilled high school and university players—how the ball becomes dead—illustrations of personal and technical fouls—violations—rights of player in possession of ball, player without the ball—dribbling—feinting—screening—air dribble—crowd scene. (Jr. High through Adult)

MODERN BASEBALL (OSFS)

25 minutes—sound ..... per day $2.00

Demonstrates the rules which apply in many situations. Shows correct game administration by umpires. Made in 1953. (Jr. High through Adult)

MODERN FOOTBALL (OSFS)

25 minutes—sound ..... per day $2.00

Portrays the playing field—substitutions—the two types of downs (scrimmage and free kick)—when the snap begins and ends—illegal shifts—false starts—passing and handling the ball—eligible and ineligible players on forward passes—types of illegal passes—illustration of forward pass interference—the fair catch—illustration of personal fouls—the 3 and 1 method of enforcing penalties—rights and limitations of K and R on scrimmage kick—force—interesting pageantry surrounding the game. Suitable for coaches and officials, school assemblies, football study groups, service clubs and athletic banquets. (Jr High through Adult)

MODERN FRANCE: THE LAND & THE PEOPLE (CORONET)

10 minutes—sound $1.80 3

"human" approach to any study unit on France. (Jr. and Sr. ers, fishermen and truck gardeners all are here to bring a modern, Normandy to the steel mills of Nancy. Steel workers, grape grow-Audiences will see the France of today—from the wheat fields of High)

Unit Value

MODERN HAWAII (CORONET)

10 minutes—sound $1.80 3

The strategic position of the Hawaiian islands, their origin, settlement and industries are presented here against a background of the Islands' culture. Hawaii's position in the mid-Pacific makes it unusual geographically and important strategically. In an overview of the islands we see the important relationship between geography and geology and their effect upon the economy of Hawaii. (Jr. and Sr. High)

MODERN LITHOGRAPHER (EBF)

11 minutes—sound $1.80 3

Describes in detail the techniques of lithographic artists and the processes of duplicating black and white and color originals by means of direct and off-set lithography. The roles of the commercial photographer and the modern printing press in the mass production of attractive art prints, including advertising materials, are portrayed. (Jr. High through Adult)

MOLECULAR THEORY OF MATTER (EBF)

10 minutes—sound $1.80 3

Evidence of molecular activity in gases, liquids, and solids is presented in support of the molecular theory of matter. Animated drawings explain such phenomena as the diffusion of gases, the evaporation of liquids, and the transformation of liquids into solids, in terms of the theory. Among the features of the film are the machine gun illustration of force exerted by molecules in motion, and the microscopic view of the Brownian movement, direct evidence of molecular motion. (Jr. High through College)

MONARCH BUTTERFLY (EBF)

10 minutes—sound—color $3.60 6

Portrays the four stages in the life cycle of the Monarch butterfly. Close-up photography depicts the monarch laying its eggs, and shows the caterpillar eating its way out of the egg, feeding, molting, forming its chrysalis, and emerging as a butterfly. (Elementary through Sr. High)

MONTEVIDEO FAMILY (OIAA)

19 minutes—sound $1.20 2

An interesting study of the daily life of one typical middle-class family of Uruguay in its capital city. The housework, schoolwork, the cultural and entertainment diversions, the work of the father. (Elementary through Adult)

MOON, THE (EBF)

10 minutes—sound $1.80 3

The technique of animation and other cinematic devices present the story of the moon. The different concept of tides explained, as are the phases of the moon. Other lunar phenomena explained by special cinematography and animation are: the moon's orbit; the lunar month; sunrise and sunset on the moon; occultation of stars; the moon's path in space; lunar eclipses; and solar eclipses. (Jr. High through College)

Unit Value

MORE MILK (USDA)

10 minutes—sound $1.20 2

This film represents the need for increased milk production. For this increase the country looks—not to the large commercial dairy herds which are already producing to capacity, but to small farm herds of a dozen or so cows. The treatment that cows can be given to increase production. (Elementary through Sr. High)

MOSQUITO (EBF)

10 minutes—sound $1.80 3

Reveals the life cycle of the mosquito, and emhasizes importance of malaria mosquito control. With remarkable close-up photography, the film portrays egg-laying, egg hatching, the molting process, the pupa stage, and the emergence of the adult mosquito. It then presents examples of areas where mosquitoes breed, and demonstrates effective methods for combatting the insect. (Elementary through Sr. High)

MOSQUITO—PUBLIC ENEMY (C)

11 minutes—sound $1.20 2

Shows several varieties of the mosquito, describes it as a pest and public enemy, and pictures its life history and several methods of control. (Jr. High through Adult)

MOTHER DUCK'S SURPRISE (YA)

10 minutes—sound $1.80 3

An animal film telling the story of Mother Duck's disappearance from the backyard; how Father Duck searches for her, inquiring of all the other animals; and how Mother Duck finally is found on her nest, hatching a new family of ducklings. (Primary)

MOTHER HEN'S FAMILY (CORONET)

10 minutes—color—sound $3.60 6

With Jerry, we follow the story of birth from the beginning of embryonic development through the hatching of a hen's egg—and count the days necessary for the process. We observe the growth of the living embryo, as we follow this life process, we learn some beginning concepts of reproduction and growth. (Primary, Intermediate)

MOTIVATING THE CLASS (McGRAW-HILL)

19 minutes—sound $3.00 5

A young student teacher of mathematics learns that adequate motivation is basic to all good teaching, and is obtained by translating the values of the subject mater into terms the pupils can understand. (College and Adult)

MOUNT RAINIER (EBF)

12 minutes—sound—color $3.60 6

A survey of the various life zones from the bottom to the top of Mount Rainer. The plants and animals of the snow and ice zone, the meadow zone, and the forest zone are shown. Since most forms of life are essentially absent from the top zone, the emphasis there is on the work of ice and its melting water. (Jr. High through Adult)

Unit Value

MOUNT VERNON IN VIRGINIA (Presented by Mt. Vernon Ladies Assn.)

22 minutes—sound $1.20 2

Presents Mt. Vernon as it might have been seen by Washington himself upon returning home on Christmas Eve, 1783, after completing his duties as commander-in-chief of the American Armies. All the well-loved objects of his home are seen thru his eyes. (High School and Adult)

MOUNTAIN BUILDING (EBF)

10 minutes—sound $1.80 3

By employing animated drawings and models "Mountain Building" re-enacts significant events in geological history. The subsidence of the land about the mouth of the Hudson River, the story of the Appalachian Mountains, and the spectacular Lewis Overthrust in the Rocky Mountains are vividly portrayed. The film opens with a photographic survey of evidence which constitutes the basis of the interpretations, and closes with a consideration of the significance of these phenomena to mining and structural engineering. (Sr. High and College)

MR. AND MRS. AMERICA (OWI)

15 minutes—sound $1.20 2

This film tells you why you and I—Mr. and Mrs. America—should not only buy bonds but hold them until maturity. President Roosevelt introduces the subject to remind us that war is still the chief job of all and we at home can help most by buying and holding war bonds. Combat shots of men in action and of men wounded. If they give a life, surely we can buy bonds to help fight the war and win the peace. (Sr. High and Adult)

MUDDY WATERS (USDA)

12 minutes—sound $1.20 2

A story of land use and abuse in the Southwest. Shows conditions when the white man came and how his grazing and farming depleted soil-binding vegetation, resulting in destruction of the soil by floods and erosion. Suggests remedial measures. (Sr. High through Adult)

MULTIPLICATION IS EASY (CORONET)

10 minutes—sound $1.80 3

Here is demonstrated the procedure of multiplication. The film shows why this process is important to know and shows the main steps in learning how to multiply. Also, just as important, the film shows boys and girls that multiplication, as a means of solving real problems, can be fun, useful and rewarding. (Elementary)

MUSIC IN AMERICA (MOT)

17 minutes—sound $1.80 3

Features such outstanding musical personalities as Marian Anderson, George Gershwin, Benny Goodman, Violinist Mischa Elman, and Conductor Serge Koussevitsky. The film shows how jazz was derived from Negro folk music, how great composers like Gershwin were inspired by the popular idiom of their time. Designed to give a comprehensive picture of U.S. music and also to intensify interest in it. (Jr. High through Adult)

Unit Value

MY TRIP ABROAD (AFFlms)

10 minutes—sound $3.00 5
Mrs. Roosevelt visits Norway, Sweden, Finland, Denmark, Holland, France and England, and notes the various ways in which the Marshall Plan has been used in each to aid recovery. (Sr. High through Adult)

NAPOLEON'S RETURN FROM ELBA (YA)

27 minutes—sound $3.00 5
March 7, 1815, the decisive moments whe Napoleon flees from Elba and lands in France to lead his small army. Recreates a moment in the life of a man whose deeds affected the lives of millions of people. (Junior High through Adult)

NATURE OF COLOR (CORONET)

10 minutes—sound—color $3.60 6
This film takes up and demonstrates Newton's explanation of the rainbow, the principles of color reaction and absorption, the mixing of colors by addition and by subtraction and the application of a unique demonstration shows the principles which make this color film itself possible. (Jr. and Sr. High)

NATURE OF LIGHT (CORONET)

10 minutes—sound $1.80 3
With two boys on a fishing trip, your students will have an opportunity to study light as a form of radiant energy; to observe closely the principles of reflection and refraction; and to learn how these principles are applied to the science of optics. This film both motivates an interest in the principles and behavior of light and gives specific information. (Jr. and Sr. High)

NATURE OF SOUND (CORONET)

10 minutes—sound $1.80 3
As the railroad train roars across your movie screen, as a white puff rises from a distant factory whistle and its sound arrives seconds later, the nature of sound is simplified and clarified for your students. Our radio amateur will show them the picture of sound on his oscilloscope and leave them with a new, bright understanding of the principles of sound's vibration, its characteristics and transmission. (Jr. and Sr. High)

NATURE'S CHEMISTRY (GUT)

10 minutes—sound $1.20 2
Divided into three parts: (1) a microscopic study of a drop of water showing glass models of microscopic animals; (2) shows how sunlight converts green leaves into food and the growth of plants; (3) presents some aspects of soilless agriculture, sand culture and the application of these methods to cattle feeding. (Jr. and Sr. High)

NAVAJO CHILDREN (EBF)

10 minutes—sound $1.80 3
Here are revealed, in superb photography, set in Arizona and New Mexico, the experiences of a Navajo boy and girl in moving with their family, household effects, pets, horses, sheep and goats from their winter quarters to their summer home. Following a day's

Unit Value

journey by wagon, they camp for the night with other Navajos and after the evening meal sing native songs. In the morning, the Navajo boys hold marksmanship contests with bows and arrows. The next day brings them to their destination. Repairing their home, planting their crops, caring for the sheep and goats, and rug weaving are among the activities shown. (Primary through Jr. High)

NAVAJO INDIANS (EBF)

10 minutes—sound $1.80 3
Glimpses of Navajo Indian life which few white people know about. The girls tend the sheep and goats and ask the boys to dance. The boys race ponies. We see homework of weaving and gardening. Silversmithing, home-building, and cooking are also presented. A native wedding with Navajo conversation and songs. (Jr. and Sr. High)

NEAR HOME (IFB)

25 minutes—sound $2.40 4
To illustrate several principles that are basic to good teaching, a class and teacher study the community in which they live. In the study of the community by the pupils, and the part played by the teacher, can be observed in a learning process that takes advantage of an inherent interest in things near by and approaches the learning process as problem solving. (Jr. High through Adult)

NEGRO SOLDIER, THE (OWI)

45 minutes—sound $1.20 2
A Negro preacher reviews the part played by his race in the development of the United States and in the current war. Excellent picture and musical background. (Elementary through Sr. High)

NERVOUS SYSTEM (EBF)

10 minutes—sound $1.80 3
Structure of the nervous system, particularly in man; its pathways and connections. The nature of the nerve impulse; conditions for setting up impulses; their passage from cell to cell; their discharge and resultant activity. Reflexes. Sensory integration, and activity of the cerebrum. (Jr. High through College)

NEVADA AND ITS NATURAL RESOURCES (Bureau of Mines)

31 minutes—sound—color $1.20 2
A description of the state of Nevada, with emphasis upon its mineral resources and mining operations. (Jr. High through Adult)

NEW ENGLAND: BACKGROUND OF LITERATURE (CORONET)

10 minutes—sound $1.80 3
Now your classes can explore Thoreau's pool, sit snugly at Whittier's hearth and thrill to see the ensign flying from Old Ironsides. Here is the New England as we know it through the works of Bryant, Emerson, Longfellow, Whittier, Thoreau, Holmes and Alcott. The works of these authors will take on new meaning as students see the New England these authors wrote about. (Jr. and Sr. High)

Unit Value

NEW ENGLAND FISHERMEN (EBF)

11 minutes—sound $1.80 3
Domestic life and work of New England fishermen. Fishing on Grand Banks is main scene. Work and living conditions aboard a steam trawler which drags a fish net along the ocean floor. (Elementary through College)

NEW NUMBERS (Ind. U.)

27 minutes—sound $4.80 8
Explains new and important number concepts in modern mathematics. Indicates the pattern of how new numbers arise. Presents some of the history, characteristics, and uses of negative, irrational, transfinite, and complex numbers, as well as quaternions. (College, Adult)

NEW SOUTH (MOT)

17 minutes—sound $1.80 3
The South found itself almost ruined and poverty-stricken at the close of the War between the States. With new experiments in agriculture, mining, and even industry, these states are now working harder than ever to regain their rightful economic and social level. The Berry School typifies this effort. (Jr. High through Adult)

NEW TOOLS FOR LEARNING (EBF)

20 minutes—sound $1.20 2
The development and use of new tools has increased the production of food, industrial products, health, and transportation in America, and the question is posed, what new tools are being used to better education. Audio-Visual aids and other instructional materials are demonstrated in a variety of classroom uses and at all age levels, but it is indicated that these new tools are not used as widely nor as fully as the new tools which are improving other aspects of American life. (College-Adult)

NEW YORK USA—Living in a Metropolis (UWF)

20 minutes—sound $3.00 5
Huge cities, commonly referred to as metropolises, have grown up in the last century as trading, transportation, and manufacturing centers to serve the needs of people in an industrialized commercial nation. The giant city of New York has been selected as the subject of this film. The portrayal of the fact that in New York City millions of people of different cultural and racial backgrounds live together in peace, all eventually becoming Americans, makes this an exceptionally engrossing film story. (Elementary through Adult)

NEWSPAPER STORY (EBF)

15 minutes—sound $2.40 4
Presents a vivid behind-the-scenes view of a newspaper office. Follows a human interest news story from the time a reporter first learns of it until it appears in print on the front page. Impressively illustrates the duties of the workers who observe, write, edit, print and distribute the daily newspaper. Shows the huge presses and other mechanical devices which make possible the printing of thousands of newspaper copies in a matter of minutes.

Unit Value

Suggests the tremendous importance of the newspaper as a medium of communication. (Elementary through Adult)

NEXT TIME WE SEE PARIS (FF)

10 minutes—sound $1.20 2

Musical one-reeler based on two French songs, "Si Tu Vas a Paris" (Next Time We See Paris) and "Surles Quais du Vieux Paris" (On the Quays of Old Paris). Sung by Mme. Claude Alphand. (Elementary through Adult)

NICKEL MINING (BM)

16 minutes—sound $1.20 2

Pointing out on a map the Sudbury district, Ontario, where most extensive deposits of nickel-bearing ores are located, this film proceeds to show in detail the nickel mining processes. (Sr. High through Adult)

NIGHT BEFORE CHRISTMAS (C)

10 minutes—sound $1.80 3

A delightful movie based on Clement C. Moore's famous poem. (Primary and Elementary)

NIGHT MAIL (BIS)

25 minutes—sound $3.00 5

Pictures the journey of the Postal special from London to Scotland, a fast express carrying no passengers but manned entirely by post office workers. Mail is sorted on board and at various railway centers on the way mail bags are received or dispatched.

NILE RIVER VALLEY AND THE PEOPLE OF THE LOWER RIVER (ACADEMY)

17 minutes—sound—color $4.20 7

Features the lower half of the Nile River from the semi-arid plains of central Sudan through the dry desert land of Egypt to the mouth of the Nile in the Mediterranean Sea. The annual flood of the Nile and its effects on the life of the people and agriculture is shown. Includes scenes of irrigation projects, the temples of Karnak, the pyramids of Gizeh, the cities of Khartoum, Luxor and Cairo. (Elementary through Adult)

NO SMOKING (SID DAVIS)

10 minutes—sound $1.80 3

To point out the harmful effects of smoking, especially to young people; how smoking causes one-third of all fires, and how smoking effects the health and length of life of smokers. (Jr. High through Adult)

NOR LONG REMEMBER (JH)

14 minutes—sound $1.20 2

The scene of the picture is a small town general store several days after President Lincoln's delivery of the Gettysburg address. The storekeeper, the town school teacher, and other townspeople discuss the dedicatory ceremonies. The teacher defends the President's speech against the jibes of the others, and when the newspapers describing the event arrive, the various editorial comments are discussed. As the teacher points out some of the beauty of the

Unit Value

speech, the scene changes to the ceremony at Gettysburg with President Lincoln himself delivering the classic address. (Elementary through Sr. High)

NORMANDY INVASION (OWI)

19 minutes—sound $1.20 2

An unforgettable record of the tremendous preparations and effort made by the invasion forces on D-Day. (Jr. High through Adult)

NORTH CAROLINA—VARIETY VACATIONLAND (NCCD)

22 minutes—sound—color $1.20 2

Depicting North Carolina's four season vacationland—coast, mid-south resorts and mountains, the travelogue opens with winter scenes at Pinehurst. It moves to the subtropical southeastern coastal area for spring beach and floral scenes. Then the viewer is taken to Nags Head Beach past Cape Hatteras. A pause is made on Roanoke Island to view scenes from "The Lost Colony." The film moves westward along the mile-high Blue Ridge Parkway into the Great Smoky Mountains National Park for spectacular views of mountains ablaze with autumn foliage. (Elementary through Adult)

NORTH TO HUDSON BAY (NFB)

11 minutes—sound—color $1.20 2

North to Hudson Bay takes the holiday-maker far off the beaten track. Setting out from Winnipeg on a deluxe excursion train, the camera carries us across wheatlands, past lakes, into famous mining towns and over muskeg to the port of Churchill. Here the modern explorer is introduced to local wildlife, and learns about the commercial and scientific activity in this most northerly of major Canadian ports. (Elementary through Adult)

NORTHEAST USA —Maine Harbor Town (UWF)

20 minutes—sound $3.00 5

In New England, the thin stony soil makes farming difficult. Fortunately, other resources can be developed to provide a livelihood. In this film, we see the Keller family, living near Camden, Maine, illustrate how the ingenuity of a people can supplement the income derived from farming rugged lands in a climate with a short cool growing season. We see them capitalizing on other natural resources. Employment is obtained in nearby industrial plants. The Kellers provide shelter for tourists who come to enjoy the recreational facilities of New England. Some of their neighbors earn part of their living from the harvest they reap from the sea. (Elementary through Adult)

NORTHEASTERN STATES, THE (EBF)

10 minutes—sound $1.80 3

Provides an interpretation of historical progress in the development of resources in the areas of West Virginia, Maryland, Delaware, District of Columbia, New Jersey, Pennsylvania, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire and Maine. Features of the land, people, natural resources, textile, clothing and heavy industries are shown in their interrelated aspects. (Elementary through Adult)

Unit Value

NORTHWEST USA—The Lumber States (UWF)

20 minutes—sound $3.00 5

The Pacific Northwest has the finest forest of our country. The tall trees of this area are excellent for lumber, and we learn how the people work in this greatest of our lumbering sections. We see them engaged in safeguarding the forest to prevent this rich lumber supply from becoming exhausted. We learn how young people are taught to prevent forest fires and to keep young trees growing to replace those that are cut down. Washington and Oregon are prosperous because of their rich natural resources of water power, fisheries, farmlands and forests. New industries are moving into the Pacific Northwest because of the abundance of cheap electricity. In this area are the great salmon fishing grounds. One of our largest wheat growing areas lies east of the coastal mountain range. But of all the natural resources of the Northwest, none is more valuable than its timberland. (Elementary through Adult)

NORTHWESTERN STATES, THE (EBF)

10 minutes—sound $1.80 3

Depicts characteristics of the states of Montana, North Dakota, South Dakota, Wyoming, Idaho, Utah, Colorado, Nebraska, and Kansas. Topography, rainfall, drainage, fauna and flora, people, metropolitan centers, scenic and recreational features, transportation and commercial activities, natural resources and agricultural situations are shown. (Elementary through Adult)

NORWAY—Farmer-Fisherman (UWF)

20 minutes—sound $3.00 5

Here there is the sea and its wealth; there is the rugged, mountainous land with arable areas occupying less of its surface than lakes and other bodies of water. It is the physiographic aspects of Norway which are at once apparent when the picture begins with its focus sharpened upon a typical farmer-fisherman coming in from the sea. The man, his face lined from years of exposure to salt spray and biting wind is as rugged as the granite shores of a thousand fjords; his son, still in his 'teens already measures up to a man's job. Their home, representative of a rural Norway, is self-sufficient with its intensive cultivation of a tiny farm, its poultry, its livestock and its income from the sea to be spent on needs they cannot grow or manufacture. You live with the family, know their names, hear them talk, listen to their music, are aware all the while that the incentives motivating these people are familiar, but their customs, viewpoints and self-reliance are all born of environment. GEOGRAPHIC CONCEPT: People living on a seacoast, on relatively poor land, turn to fishing and seafaring as a dual source of livelihood. (Elementary through Adult)

NO TEACHER ALONE (NEA)

20 minutes—sound $1.00

Cleo Thomas, a competent instructor and a member of her local and state teachers associations, derides a long-time friend who is about to enroll a new teacher in the National Education Association of the United States. Cloe's original attitude of scorn gradually changes to one of thoughtful consideration as she sees what is being done and begins to sense her relationship to it all.

Unit Value

NOT BY CHANCE (NEA)

28 minutes—sound $1.00

In a good program of undergraduate teacher education we see a prospective teacher acquiring the knowledge, the understanding of children, and the special skills that will make her a good beginning teacher. Through her program, the audience is introduced to many of the important current practices in teacher education in such areas as admissions, classroom instruction, campus life, guidance activities, observation, and directed student teaching.

NORWEGIAN CHILDREN—Farming on a Fiord (EBF)

10 minutes—sound $1.80 3

Provides an interesting visit with a farm family on a fiord in western Norway. Portrays typical activities of the children and mother tending livestock on the mountains during the summer. Emphasizes dairying activities such as milking, cheese making, and transporting milk to dairy in valley. Follows family back to farm home in valley and describes trip of children across fiord to village and cooperative dairy. Concludes with neighborhood festival to celebrate homecoming of the women and children. (Primary and Elementary)

NUMBER SYSTEM (EBF)

12 minutes—sound $1.80 3

Illustrates the principles of the number system by organizing large numbers of objects (in this case, Boy Scouts) into groups of ten. It also shows how written records of such groupings can be made by means of tallies or numerals and the idea of place value. The objective is to provide the child with an understanding of the number system. (Primary)

NURSE (EBF)

11 minutes—sound $1.80 3

Here we learn to appreciate more fully the warm personality and the skill of the nurse as we share some of the interesting experiences of Miss Austin—a hospital nurse. (Primary and Elementary)

NURSERY RHYMES (Ind. U.)

14 minutes—sound $3.00 5

Presents the book *Tommy Tittlemouse Nursery Rhymes* with pictures by Katherine Evans, published by the Children's Press. A guessing game is played with rhymes and pictures. (Primary)

OBESITY (Problems of Fat Formation and Overweight) (EBF)

12 minutes—sound $1.80 3

By dramatizing ways in which adults and children are handicapped by obesity, this film calls attention to the importance of maintaining proper weight. Animated drawings illustrate fat formation and fat utilization. The film reveals psychological as well as physiological causes of obesity and explains why a condition of overweight adds strain to the heart and to the body frame. (High School and Adult) (Health and Hygiene)

Unit Value

OBJECTIVE: SECURITY (USMC)

18 minutes—sound $1.20 2
This film shows how 840 officers and men trained in civil affairs set about solving the problems of fear, hunger, and sickness found among the huge civilian population of Okinawa following its invasion by American forces in World War II. It illustrates how military and civilian affairs must be coordinated, how racial strains often mix to produce a problem population, and how under good management and with modern machinery the dormant resources of the land can be used to raise the standard of living. (Elementary through Adult)

OCALA (USDA)

11 minutes—sound $1.20 2
A scenic tour through Ocala Park in Florida. (Elementary through Adult)

OFFICE COURTESY (EBF)

12 minutes—sound $1.80 3
This film in human relations dramatizes techniques for office workers in meeting and working with persons outside the company, face to face and over the telephone. It emphasizes the importance of courtesy and thoughtfulness and reveals how the employee's attitude may, without his realizing it, have considerable effect on his company's success. (High School and Adult)

OFFICE ETIQUETTE (EBF)

16 minutes—sound $2.40 4
Emphasizes the importance of courtesy in everyday business contacts by portraying ways in which office etiquette contributes to success in office relationships. (Sr. High through Adult)

OFFICE TEAMWORK (EBF)

12 minutes—sound $1.80 3
A contribution in the field of human relations in business and industry. The film illustrates the importance of cooperation among the members of a business organization. It dramatizes representative office situations in which teamwork is extremely important, and reveals the effects of various employee attitudes on company morale and business. (High School and Adult)

OHIO AND ITS NATURAL RESOURCES (Bureau of Mines)

29 minutes—sound—color $1.20 2
Develops the theme that the "common" minerals, such as coal, petroleum, limestone, dolomite, salt, and clay—all produced in Ohio—provide the basis for the great industries. Demonstrates that ample opportunities exist in the state for producing minerals and converting them into products people need. Maps show Ohio's principal coal mining areas, oil deposits, natural gas reserves, limestone deposits, dolomite formations, etc. (Jr. High through Adult) (Natural resources)

OHM'S LAW (CORONET)

6 minutes—sound $1.20 2
This film graphically explains Ohm's Law—voltage, current, electrical resistance, and their inter-relationships. By applying the Law to the principles of water pressure, flow and water resistance,

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the law is stated visually, and associated terms are clearly explained. Several practical applications are depicted which serve to point out the importance of Ohm's Law as a basic principle of physical science. (Junior High)

OKLAHOMA AND ITS NATURAL RESOURCES (BM)

26 minutes—sound—color $2.20 2

The story of Oklahoma, as unfolded on the screen, traces the colorful history of the state and the development of rich natural resources. Delving into the past, the film tells how Oklahoma was once part of the Louisiana Purchase, proclaimed Indian Territory in 1834, established as the Territory of Oklahoma in 1890, and was admitted to the Union as the 46th state. (Jr. High through Adult)

ON OUR OWN (NatfdInfantPar)

14 minutes—sound $1.20 2

Shows the physical phase of rehabilitation from patient's standpoint. (Adult)

ON THE DIFFERENCE BETWEEN WORDS AND THINGS (Ind. U.)

27 minutes—sound $4.80 8

Discusses the consequences of forgetting that words only point to things. Illustrates how attention to words alone may lead to unrealistic behavior. Emphasizes that words make it easy to distort descriptions of reality. Demonstrates that it is easier to exaggerate in our speaking than to be precise. Shows that the tendency of exaggeration ignores the present state of a person or thing. Recommends the use of the dimension of time in our speech as well as greater attention to the real. (College and Adult)

ON TWO WHEELS (JH)

10 minutes—sound $1.80 3

The juvenile traffic court which hears cases and sentences violators of the safe bicycle riding code is here shown in operation. By learning to ride their bicycles safely, cyclists are shown mastering the rules of highway safety, rules that can be applied with equal effectiveness in driving an automobile. Each picture clearly presents the rules for traffic safety. (Elementary and Jr. High)

OPAQUE PROJECTOR: ITS PURPOSE AND USE (StU of Iowa)

6 minutes—sound $1.20 2

The method of operating, using, and maintaining the Beseler Vu-Lyte opaque projector are demonstrated by means of straight photography and diagrams. Ways of adjusting the projector for screen size, focusing, and other techniques. Various instructional fields are given as examples of the projector's many uses. (Sr. High through Adult)

OPEN WINDOW, THE (BIS)

18 minutes—sound—color $2.40 4

A journey through the countryside of five lands—Britain, France, Belgium, The Netherlands, and Luxemburg—as their great landscape painters have seen it during five centuries.

Unit Value

OPERATION OF A FOREST NURSERY (USDA)

10 minutes—sound $1.20 2
This U. S. Department of Agriculture film shows reforestation measures. (Jr. through College)

ORANGE GROWER (EBF)

10 minutes—sound $1.80 3
Describes the location of citrus growing activities, and tells the story of a typical orange grower and his family in their efforts to raise and harvest their crop. Budding, pruning, planting, fertilizing, irrigating, controlling insects and temperature are all shown. (Elementary through Adult)

OREGON AND ITS NATURAL RESOURCES (Bureau of Mines)

30 minutes—sound—color $1.20 2
The scenic grandeur and varied resources of minerals, forests, land and water are depicted. (Jr. High through Adult)

OREGON TRAIL, THE (EBF)

25 minutes—sound $3.00 5
Filmed in the reconstructed frontier town of New Salem, Illinois, and along the Oregon Trail, this film recreates the tremendous saga of the Westward crossing of the American continent through the eyes of a pioneer family. (Elementary, Junior High, Senior High)

OTHER FELLOW'S FEELINGS (YA)

11 minutes—sound $1.80 3
A discussion type film for the middle grades and junior high school, dealing with the unfortunate effects of prolonged teasing or ridicule. An "open ending" sets the stage for the post-showing discussion by the class of the situation dramatized by the film. (Elementary through Adult)

OTHER PEOPLE'S PROPERTY (YA)

10 minutes—sound $1.80 3
A discussional film on the problem of damage to school property. Three boys start out on a prank, but it "snowballs" far beyond their original intentions. (Elementary and Jr. High)

OUR BASIC CIVIL RIGHTS (CORONET)

14 minutes—sound $2.40 4
Civil rights are preserved by our citizens and defined by our courts. This film presents basic concepts of civil rights and directs the class toward a detailed study of our liberties which are fundamental to our society and defined in law. (Jr. and Sr. High)

OUR BILL OF RIGHTS (ACADEMIC)

20 minutes—sound $3.00 5
Re-creates the forming and adopting of the first 10 amendments, or the Bill of Rights, to the Constitution. Shows the influence of James Madison at this time. Madison, George Washington, Benjamin Franklin, John Randolph, Alexander Hamilton, and John Jay made this historic time very real. (Jr. High through College)

Unit Value

OUR COMMON FUELS (CORONET)

11 minutes—sound $1.80 3

This general science film is designed to show what fuel is and to indicate the sources and uses of our common fuels under two groupings: natural and manufactured fuels. The story centers around Jim and Bob who learn the desired lessons while arranging and securing materials for a display table in the classroom. (Elementary and Jr. High)

OUR COMMUNITY (EBF)

11 minutes—sound $1.80 3

Illustrates important community institutions and their services by portraying a day in the life of a 10-year-old boy. Depicts such services as police and fire protection, health safeguards, and parks and recreational facilities. Points out ways in which the members of a community serve each other, and emphasizes that membership in a community is a responsibility as well as a privilege. (Elementary)

OUR CONSTITUTION (ACADEMIC)

18 minutes—sound $3.00 5

Dramatic events immediately leading to the Constitutional Convention in Philadelphia in 1787. George Washington, Benjamin Franklin, James Madison, Alexander Hamilton, and others reenact their dramatic roles in this film. (Elementary through Adult)

OUR COUNTRY'S FLAG (CORONET)

10 minutes—sound—color $3.60 6

The reasons for the respect to the flag and the reasons for the flag itself are not always clearly understood. This film provides much of this important information. It explains the meaning of the flag, its symbolism and why it should be respected. *The Pledge of Allegiance* is told about in terms of everyday activities, and rules of respect to the flag are reviewed and clearly defined. (Elementary)

OUR DECLARATION OF INDEPENDENCE (ACADEMIC)

18 minutes—sound $3.00 5

An authentic dramatization, not only of the signing of the great document, but of the years' struggle and strife before the signing. The Stamp Act, the Quartering Act, the Boston Tea Party, the Committees of Correspondence and the many other flaming events leading to the declaration of July 4th are vividly portrayed. (Elementary through Adult)

OUR EARTH (EBF)

10 minutes—sound $1.80 3

A survey of physical aspects of our earth in their relations to concentrations and activities of people. Beginning with oceans and ocean currents, their effects on climate, and consequently on peoples, the film continues to delineate similar effects of various types of coast lines and harbors, rivers and lakes, valleys, plateaus, and mountains. (Jr. and Sr. High)

Unit Value

OUR FOSTER MOTHER, THE COW (FRITH)

10 minutes—sound—color $3.60 6
This film portrays the happenings on a dairy farm. Emphasizes the importance of milk, and the service of cows to mankind. (Primary and Elementary)

OUR INHERITANCE FROM HISTORIC GREECE (CORONET)

10 minutes—sound $1.80 3
How our American life reflects the culture of Greece in language, thought, architecture, drama and even mathematics, is vividly portrayed in this motion picture. Classes will develop a sense of appreciation for our heritage from Greece by re-living the events of those times which are shown in relationship to their own everyday life. (Jr. and Sr. High)

OUR LIVING CONSTITUTION (CORONET)

10 minutes—sound $1.80 3
This film brings the study of our Constitution to life, showing how the basis of our government changes and grows to meet the needs of the times, while holding to the principles of thought we hold dear. The picture shows how the Constitution operates in problems which are close to us by guaranteeing our rights and freedoms and protecting the interests of the people. (Jr. and Sr. High)

OUR LIVING DECLARATION OF INDEPENDENCE (CORONET)

16 minutes—sound $2.40 4
Freedom, rights, obligations, the pursuit of happiness—meanings of these terms are explored as this timely film develops its theme that the Declaration is not a dead historical document, but a vital force and guide to living today. Illustrations from the lives of an immigrant and his children give present-day meaning to the principles of the Declaration. (Jr. and Sr. High)

OUR LOUISIANA PURCHASE (ACADEMIC)

18 minutes—sound $3.00 5
Shows how the Louisiana Territory was purchased from France. Historical figures involved in this transaction include Napoleon, Talleyrand, Ambassador Livingstone, James Madison, and Thomas Jefferson. (Jr. and Sr. High)

OUR MONROE DOCTRINE (ACADEMIC)

18 minutes—sound $3.00 5
Such characters as John Quincy Adams, Henry Clay, John Calhoun, and of course James Monroe, play their dramatic and historic roles. Considers why it was necessary to issue the Doctrine; what forces were instrumental in shaping the policy proclaimed; the part of independence of the South American republics in influencing the policy of the United States; the Holy Alliance of Europe and their aims for world domination. (Jr. and Sr. High)

OUR NATIONAL GOVERNMENT (KB)

11 minutes—sound $1.80 3
A graphic analysis of our form of National Government showing and explaining the separate functions of each branch. Actual scenes in Washington, our National Capitol, giving a clear mental

Unit Value

picture of the magnitude of the business of government. (Elementary through Adult)

OUR SOIL RESOURCES (Formation and Conservation) (EBF)

10 minutes—sound $1.80 3
Explains graphically, how soil is formed by the phyical and chemical disintegration of rock and by the decomposition of plant and animal mater. Points out the world's four soil groups and defines the geographic limits of each in the United States. Describes how man, through poor farming methods, has depleted the soil; and explains techniques for replacing fertility losses and curbing erosion. (Jr. and Sr. High)

OUT OF THE DARK (EBF)

15 minutes—sound $2.40 4
Here is the history of illumination by artificial means, from stone lamp, candles, oil and gas lamps, to arc lighting and incandescent lights. The film shows the steady progress of man's struggle against darkness, ending with a brief exploration of the newest developments of the electrical discharge tube. (General Science)

OUT OF THE HEART (FILMEDIA)

10 minutes—sound—color $1.20 2
The heart-warming story of a boy and his dog. Kindness, loyalty, patience, teamwork and other desirable character traits are often strengthened in humans by association with animals, and this is the observation that you will make from this film. Rags, canine hero of the film, turns the tables on Billy, the human half of the featured cast, by teaching his master many important secrets of life—while Billy all the while thinks he is teaching Rags. (All age groups)

OUT (UN)

20 minutes—sound $2.20 2
This is a story of the Hungarian refugees with emphasis on one woman and her two children who are in search of a home. Lack of a plan, filled quotas and no partcular specialty are among the many problems faced by the people who have fled from behind the Iron Curtain.

OUTBOARD FISHERMAN (U.S. WILDLIFE)

27 minutes—sound—color $1.20 2
Shows the various uses of outboard motor boats by fishermen along the east and west coasts of the United States and in the Gulf of Mexico. (Sr. High through Adult)

OUTSIDER (YA)

10 minutes—sound $1.80 3
A discussional film dramatizing the problem of a young girl who feels that she is rejected by her school group. Points the way for a discussion of the mutual responsibilities of the individual and the group in such situations. (Elementary and Jr. High)

OVERCOMING FEAR (CORONET)

14 minutes—sound $2.40 4
Here is an unusual film that shows the value of courage in meeting problems in everyday living. Courage is presented as an attitude

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which can be developed . . . cowardice is shown to be a characteristic that is specific: i.e., a response in reference to one specific type of situation. How overcoming a specific fear can make a better all-around person is the lesson found here. (Jr. and Sr. High)

OVERCOMING WORRY (CORONET)

10 minutes—sound $1.80 3

Nearly everyone is burdened with worry at some time. This film demonstrates that worry *can* be overcome. It shows first the contagious quality of worry—how it spreads among the members of a closely knit family group. Then the film shows how a person can not only work to overcome worry but also help someone overcome his problems. (Jr. and Sr. High)

OVERHEAD PROJECTOR (IowaStU)

16 minutes—sound $2.40 4

Shows the fundamental purposes and use of the 10 by 10 inch overhead projector and the methods of producing transparencies for this equipment. (College through Adult)

OXIDATION AND REDUCTION (EBF)

10 minutes—sound $1.80 3

The simultaneous process of oxidation and reduction is presented first by burning phosphorus and rusting iron under experimental conditions. Mercury rust is then decomposed to discover the component of air responsible for oxidation. Other examples of oxidation agents such as: the blast furnace, magnesium burning in dry ice, and thermite welding, are shown. (Jr. High through College)

OXYGEN (CORONET)

10 minutes—sound $1.80 3

Laboratory demonstrations develop the characteristics, uses and significance to man of oxygen and its compounds. Technical nomenclature is reduced to a minimum; but the explanations of electrolysis, oxidation, forms of oxygen, etc., start students on the development of a scientific vocabulary. Some experiments, like the electrolytic decomposition of water, are treated fully and in detail. Then a survey of the preparation, properties and characteristics of this important element is presented. (Jr. and Sr. High)

PACIFIC CANADA (EBF)

10 minutes—sound $1.80 3

Canada's great Pacific Province is British Columbia, including Vancouver Island and many smaller islands. The Yukon Territory adjoins it on the North, extending to the Artic Ocean. The Coast Range and the Rocky Mountains that extend northwestward to Alaska makes this region even more mountainous and rugged than western U. S. to the south. (Jr. High and Adult)

PACIFIC—DISCOVERY AND EXPLORATION (EBF)

10 minutes—sound—color $3.60 6

Portrays and explains by means of technicolor animation the role played by the Pacific Ocean in international affairs. Shows growth of man's knowledge of the Pacific through the voyages of the early explorers and later expansion of settlement in this area. Traces the settlement of Pacific islands and coastal areas by

Unit Value

British, Russians, Germans, French, Dutch, and Americans and discusses the establishment of political control by these nations. Concludes with a review of the defeat of Japan's efforts to control the Pacific. (Elementary through Adult)

PACKAGED POWER (MOD)

31 minutes—sound—color $1.20 2
The search in Canada, Jamaica, and British Guiana for aluminum ore and the power necessary for refining it. Depicts the electric power project for which the Nechako Dam is being constructed in British Columbia. (Sr. High through Adult)

PAINTING: LEARNING TO MIX COLORS (YA)

8 minutes—sound—color $2.40 4
Demonstrates and explains the three primary colors as the source of the secondary colors and all their intermediate shades. (Elementary through Sr. High)

PAINTING: LEARNING TO USE YOUR BRUSH (YA)

11 minutes—sound $1.80 3
Begins by pointing out that painting can be fun as a personal hobby, then explains the simple materials required to start, and demonstrates the basic brush strokes used in painting. (Elementary through Sr. High)

PAINTING: SOLID FORMS (YA)

11 minutes—sound $1.80 3
This film explains that solid objects have three dimensions, then demonstrates how the painter achieves the illusion of the third dimension (thickness or depth) in the object he is painting. (Elementary through Sr. High)

PAINTING WITH SAND: A NAVAJO CEREMONY (EBF)

10 minutes—sound—color $3.60 6
Uses an impressive story treatment to portray vividly the traditional sand painting healing rite as performed by a Navajo medicine man for his ailing son. Reveals the beauty of a unique art form, and stresses its significance in the tribal life of the Navajos. Presents actual sand painting in full detail against the grandeur and color of the Southwestern landscape. (Elementary and Jr. High) xx

PALESTINE (MOT)

16 minutes—sound $1.80 3
Reveals not only the progress that has thus far been made toward modernization of the Holy Land, but also the problems to be solved and the obstacles to be surmounted before the Jewish people can achieve their objective of a modern Jewish state. (Jr. High through Adult)

PAN AMERICAN BAZAAR (OIAA)

9 minutes—sound—color $1.20 2
The arts and crafts of the southern republics elaborately displayed in an exhibition at the famous Macy Department Store in New York City. (Sr. High through Adult)

Unit Value

PANAMA: CROSSROADS OF THE WESTERN WORLD (CORONET)

10 minutes—sound $1.80 3

Panama is a curious blend of old Spain and American progress. As the link between the Atlantic and Pacific, Panama is a country where passage, transfer and mixture permeate the cultural and economic life. The camera spots this influence in Panamanian architecture, social customs, agricultural practice and industry. (Jr. and Sr. High)

PAPER (EBF)

10 minutes—sound $1.80 3

Tells the interesting story of modern paper making, from the forest to finished sheets. Selected scenes show paper being made into items familiar to children. Trees cut and sawed in the forest and logs are hauled to the mill where they are barked and cut into chips. The chips are then made into pulp. The machine that makes paper from pulp is carefully explained. The entire picture is a pictorial exposition of modern technology at a child's level of interest and understanding. (Primary and Elementary)

PARACHUTES FOR SAFETY (SWITLIK)

20 minutes—sound $1.20 2

Types of parachute packs, how chutes are put on and handled in planes, how chutes are made, and a dramatized emergency drop from a transport plane. (Sr. High through Adult)

PARAGUAY (OIAA)

17 minutes—sound $1.20 2

The story of the people of Paraguay, a hardy and independent people who have survived the devastating history of warfare and disadvantage. The country's interesting quebrancho and mate industries are shown along with its distinctive and vigorous Indian culture. (Elementary through Adult)

PARLIAMENTARY PROCEDURES IN ACTION (CORONET)

14 minutes—sound $1.80 3

Dropping in on a session of a well-run high school club, we observe the proper procedures for seconding motions, amending motions, calling for a division of the house, rising to a point of order, tabling a motion and the other commonly used parliamentary forms. We see parliamentary procedure based on the democratic principle upholding that principle in an orderly assembly. (Jr. and Sr. High)

PARTIES ARE FUN (CORONET)

10 minutes—sound $1.80 3

Here is a party for the youngsters, with all the games and general activities that make parties fun. The film presents information about planning for and behaving at a party on a level with primary-intermediate word lists. The audience can help plan the party right along with the young hostess in the film, and then share in the pleasure of the games and presents. (Primary)

PASSENGER TRAIN (EBF)

11 minutes—sound $1.80 3

Interprets a journey on a modern, streamline, Diesel-electric

Unit Value

powered passenger train from a large city through a picturesque countryside. The duties of the ticket seller, gateman, baggageman, conductor, engineer, motor attendant, mail clerk, dining car cook, waiter, and Pullman porter are depicted and commented upon. Right-of-way problems including tunnels and bridges are portrayed. Comfort, safety and efficiency are given attention. (Primary and Elementary)

PATZCUARO (OIAA)

11 minutes—sound—color $1.20 2
Life of the Tarascan Indian fishermen on the shores of Lake Patzcuaro, west of Mexico City. The famous Dance of the Old Men is performed on one of the fiesta days in the market place. (Jr. High through Adult)

PAUL BUNYAN AND THE BLUE OX (CORONET)

6 minutes—color—sound $1.80 3
This delightful and imaginative film retells the story of Paul Bunyan and Babe, the Blue Ox, using puppets as the central characters. The story of how Paul found Babe and put him to work is one which children will enjoy seeing and talking about for a long while. *(Pre-School, Kindergarten, Primary, Intermediate)*

PEACE BUILDERS, THE (BRANDON)

10 minutes—sound $1.80 3
The first basic motion picture of the memorable meetings and actions of the Allied leaders, from the Atlantic Charter meeting to the United Nations Conference at San Francisco. It summarizes the proceedings and proposals worked out by Allied leaders at Ottawa, Cairo, Teheran, Moscow, Hot Springs, Bretton Woods, Dumbarton Oaks, and Yalta. It reflects the confidence and power of the Democratic peoples of the world to solve their problems through cooperation. (Jr. High through Adult)

PEACE COMES TO AMERICA (UST)

10 minutes—sound $1.20 2
Commencing with scenes of Washington at the announcement of peace, this film surveys the many items of government expense involved in bringing home our World War II soldiers, in providing them with mustering-out pay and with employment service, in underwriting the provisions of the GI Bill of Rights, and, most of all, in caring for those hospitalized as a result of military service. (Elementary through Adult)

PENMANSHIP IMPROVER (TAE)

10 minutes—sound $1.80 3
By the use of this film students learn to make skillfully three simple strokes which constitute more than 90% of all the longhand letters. Teachers who have used the system on experimental groups report complete legibility and substantial appearance improvement in less than ten hours of practice. (Elementary through Sr. High)

PEOPLE ALONG THE MISSISSIPPI (EBF)

21 minutes—sound $2.40 4
The region through which the Mississippi river flows and the

Unit Value

people who live in this region provide a unique opportunity for studying an important cross section by following a toy sailboat on a fascinating journey from the head waters to the mouth of the great river. It is a beautiful story emphasizing the peoples of different backgrounds and origins who live along the banks of the river—especially the people of French, Canadian, Swedish, German, Negro, and Acadian extraction. Reveals their oneness in purpose, ideals and in national character. (Elementary through Adult)

PEOPLE DANCE (BRANDON)

10 minutes—sound $1.20 2

Shows how different kinds of dancing are related to the varied social and economic backgrounds of the Canadian people. The slow tempo of the Indian religious dance, the pioneers' quadrille, the old world folk dances, the art form of the ballet, square dances and modern jive are presented. The film finds significance in the dance as an emotional outlet common to all but differing in form according to the origin or occupation of each group. (Jr. High through Adult)

PEOPLE OF HAWAII (EBF)

11 minutes—sound $1.80 3

Describes the setting of the Hawaiian Islands and provides an insight into the native economy. The dependence of the natives upon the sea and their immediate land environment for food; home and school life; sports and craftsmanship; and the preparation of a native feast make up the major sequences. Glimpses of mass production and harvesting of sugar cane and pineapple are also shown. (Elementary through Adult)

PEOPLE OF MEXICO (EBF)

11 minutes—sound $1.80 3

Presents a living account of the origin and development of the Mexican people, with emphasis on their dependence upon the land. It portrays the setting of a feast day in a small village, including ceremonies, dances, songs, and music. (Elementary through Adult)

PEOPLE OF THE CONGO (EBF)

11 minutes—sound $1.80 3

A study of the Mangbetu peoples living in tropical forest region of Africa. Emphasis on cleanliness in well built, immaculate homes. Careful preparation of cooked meal, of fish, bananas, manioc root, sugar cane; using clay cooking utensils made by hand. Head binding, native arts and crafts, sketching, design, wood carving, and construction of native musical instruments. (Elementary through College)

PEOPLE OF WESTERN CHINA (EBF)

11 minutes—sound $1.80 3

Shows the influence of habits and customs of past centuries on present-day China. Methods of agriculture, irrigation, and the culture and use of bamboo are shown. Representative arts and crafts, methods of transportation, and engineering skill are depicted in their traditional settings. (Elementary through Adult)

Unit Value

PEOPLES OF THE SOVIET UNION (IFF)

33 minutes—sound $3.00 5

This film pictures the many racial groups which make up the Soviet Union and gives a truly over-all concept of this vast country with its many separate and distinct peoples. It begins with the people of Moscow and Leningrad and then, in quick succession, there follows pictures of the Karelians, the Armenians, the Georgians, the Tartars, the Buryat-Mongolians, the Jews, the Ukranians, the Uzbeks, and others. (Elementary through Adult)

PERCENT IN EVERYDAY LIFE (CORONET)

10 minutes—sound $1.80 3

Through this informative film, students will learn how useful a working knowledge of percent can be to them. As they follow Bob's problems in figuring commissions, taxes, interest and discount with general, rate and base formulas, they will derive a new realization of the importance of *Percent in Everyday Life.* (Jr. and Sr. High)

PERCUSSION GROUP, THE (EBF)

11 minutes—sound $1.80 3

Variety is the keynote of this picture showing as it does, not merely the traditional snare, base and kettle drums, but also the tambourine, cymbals, triangle, bells, and zylophone. Opening measures of music are played on the celesta—an instrument which pupils rarely have opportunity to examine. The camera brings each instrument close enough for detailed examination. (Elementary through College)

PERCUSSION, THE PULSE OF MUSIC

21 minutes—sound $4.80 8

Describes and demonstrates the sounds, manner of playing and uses of representative percussion instruments. A young audience, led by members of the New York Percussion Trio, illustrate that organized clapping can be music. Members of the trio show and demonstrate wooden, skin-covered, and metal percussion instruments. The audience joins the trio in a mambo demonstrating how music can be made with some percussion instruments without long practice. Music includes Nagel, Prelude and Dance; Kabelevsky, Dance of the Comedians; Portal, Sweet and Gentle, and an excerpt from Saint-Saens, Samson and Delilah.

PERISHABLE—RUSH (OWI)

18 minutes—sound $1.20 2

Aided by excellent photography, the picture tells a story of flying ambulance travel in which the vast distances of the Pacific have been conquered in the fight against battle wound infection. The wounded G.I. is dragged from the field by the medical corpsmen who treat him even as the enemy rakes the area with fire. He is carried from the jungle fighting line in a helicoper. A giant hospital plane pilots him through a chain of hospitals until he is delivered directly into the arms of his mother. (Jr. High through Adult)

Unit Value

PERU (EBF)

11 minutes—sound $1.80 3
Animated maps help to provide a historical and geographical perspective of Peru. Ruins of pre-Inca and Inca civilizations are shown. Contemporary family life in an Indian Communal village makes up the major sequence. Modern Peruvian industries—copper mining, oil refining, cotton and sugar cane production—are treated, along with urban life in the city of Lima. (Elementary through Adult)

PERU (OIAA)

20 minutes—sound $1.20 2
A study of the modern social and economic life of Peru and of the attempt to meet certain current problems of health, poverty, relations between races, and an improvement of national economic conditions. (Elementary through Adult)

PERU—Highlands of the Andes (UWF)

20 minutes—sound $3.00 5
This film lesson is based on the geographic principle that the highest settlements in mountain regions are usually associated with mining, but where groups of people living at high altitudes depend only on agriculture, they lead a barren and difficult life. We see the difference in the kind of life led by the Peruvian Indian doing his best to eke out a bare subsistence from meager crops and few domestic animals, and the Indians who work in the operations of the mines. This film takes us right into the copper mines at Cerro de Pasco, virtually at the top of the world. (Elementary through Adult)

PETROLEUM (EBF)

10 minutes—sound $1.80 3
Animation and live-action photography show the importance of petroleum to world technology and suggest some of the critical political and economic problems related to its production and distribution. Essential steps in exploration, drilling and refining procedures are outlined. Maps show location and relative importance of oil producing areas of the world. Special emphasis given to petroleum resources of the U. S. Dramatic position which petroleum occupies in world commerce and international affairs is clearly set forth. (Jr. High through College)

PETRIFIED RIVER, STORY OF URANIUM, THE (BM)

28 minutes—sound—color $1.20 2
From its early geology in the West to its latest peacetime uses for producing atomic energy and radioisotopes, this story of uranium shows the mining and milling of the ore; the atomic pharmacy at Oak Ridge; a series of scenes in hospitals and research centers, where radioisotopes are used to diagnose and treat diseases and where scientists study basic processes of living matter; and, by artistic animation, the film describes the splitting of uranium atoms to release tremendous amounts of energy. (Jr. High through Adult)

PHILIPPINE REPUBLIC, THE (MOT)

16 minutes—sound $1.80 3
The film shows how, for forty-seven years following the Spanish-

Unit Value

American War, the 7,083 islands comprising the Philippine archipelago were heavily dependent upon the U. S. for their economic life and health. Pictured comprehensively are the educational system and political composition of the islands, up to the granting of her independence in 1946. (Jr. High through Adult)

PHOTOGRAPHIC SLIDES FOR INSTRUCTION (Ind. U.)

10 minutes—sound—color $3.60 6
This film shows the preparation and use of slides made by the photographic process. The use of color and black and white film is illustrated in outdoor and indoor situations. Flash photography, copying, and the use of Polaroid transparency film for making slides in a variety of subject areas are shown. (College and Adult)

PHOTOGRAPHY FIGHTS (OWI)

13 minutes—sound $1.20 2
This picture shows how photography is helping to win the war. It shows how under enemy action photographic crews work precious minutes getting and scanning pictures to search for signs of enemy emplacements and evidence of enemy movements. It tells what happens when well trained, discerning photographic interpreters can read from pictures shot by the crew. (Jr. High through Adult)

PICTURE PROVINCE (NFB)

15 minutes—sound—color $1.20 2
A description of New Brunswick, Canada showing its recreational facilities, historic sights, tourist accommodations, scenic countryside and natural resources. (Jr. High through Adult)

PICTURESQUE POLAND (EFLA)

10 minutes—sound—color $1.20 2
Opens with Poland at war and then turns to pre-conquest Poland as found in its peaceful countryside, in views of people, streets, and buildings in Warsaw and Krakow. Scenes are a monastery and its gardens, the Carpathian mountains, village dancing, the making of cheese and sheep grazing. (Jr. High through Adult)

PIG PROJECTS MAKE PROFITS (DUROC)

14 minutes—sound—color $1.20 2
A story of a pig club activities and the activities of young men in this phase of their life in agriculture. (Jr. High through Adult)

PILGRIMS, THE (EBF)

22 minutes—sound $2.40 4
Recreates with the aid of skillful acting, authentic sets, and period costumes one of the most significant episodes of American history: the first English Settlement in New England.

PINCERS ON JAPAN (OWI)

20 minutes—sound $1.20 2
With social emphasis on the construction and completion of the Alaskan Highway shows how the western and northern fronts of the United States, Canada, and Alaska have been fortified against

Unit Value

attacks from Japan. Scenes of the bombing of Dutch Harbor. (Adult)

PINEWAYS TO PROFIT (USDA)

16 minutes—sound $1.20 2

The old custom of burning the woods presents the most serious obstacle to forest management in the southern pine region. This film exposes the fallacy of this custom and shows benefits of good management of southern pine forests. (Jr. High through Adult)

PIONEER HOME (CORONET)

10 minutes—sound $1.80 3

What was a pioneer home really like? How did pioneer people live? What part did children play in the everyday family life? These are some of the questions which are answered in this educational film. The physical surroundings and home furnishings . . . the hard work . . . the simple pleasures . . . all are presented here. (Elementary)

PIONEERS OF THE PLAINS (EBF)

10 minutes—sound $1.80 3

Traces the experiences of a pioneer family in journeying from Illinois to a homestead on the Midwestern plains. Sequences include relationship with other settlers and cattlemen; building and decorating a sod house; plowing, collecting fuel; and contacts with a circuit-riding minister. Conversations and music of the time lend reality to the picture. (Elementary through Sr. High)

PIRRO AND THE ALARM CLOCK (OFFICIAL)

10 minutes—sound $1.80 3

Introduces Pirro, the puppet, and the wonders of telling the difference between numbers and what they represent in the way of time, and then explains what makes the alarm clock go off. (Primary and Elementary)

PLAIN INDEXING AND CUTTING A SPUR GEAR (C)

22 minutes—sound $1.20 2

The set-up of a milling machine, the use of a dividing head, and the cutting of an 8-inch spur gear with 36 teeth. Animation study of the principles of the dividing head and how it is used to secure the desired number of cuts. (Sr. High through Adult)

PLANNING YOUR CAREER (EBF)

16 minutes—sound $2.40 4

A basic vocational guidance film designed for High School students and others who are facing the problem of deciding on a career. It presents a straightforward procedure through which a person can come to a better understanding of his own capabilities and the potentialities of various careers in which he is most likely to succeed. (High School)

PLANT GROWTH (EBF)

10 minutes—sound $1.80 3

A remarkable presentation of the growth of the pea plant. It shows by time-lapse photography the entire story from the time

Unit Value

the seed first sends out its roots and stalk until the ripened seeds are scattered. The processes of pollination and fertilization are vividly portrayed by means of photography and animation. (Elementary through College)

PLANT LIFE AT WORK (MOODY INSTITUTE OF SCIENCE)

10 minutes—sound—color $3.60 6

An excellent time-lapse photography and photo-micrography study of the life functions of plants. The forces involved in the opening of the petals or the cracking of a house's foundation, the growth behavior of roots, the tropisms coordinated to assure the plant's survival, the struggle of the plant to reach sunlight, and an exceptional microscopic study of cells within the leaf during photosynthesis are shown in this film, which clearly demonstrates that plants exert force to perform work. (Jr. High-College)

PLANT TRAPS (EBF)

10 minutes—sound $1.80 3

Carnivorous plants have unusual characteristics of entrapping and digesting insects and other small animals. The film shows how the pitcher plant lures insects to its trap, where they drown. The sun-dew, another carnivorous plant, is shown throughout its life cycle. The enfolding of insects by its leaf tentacles is presented very impressively by means of time-lapse photography. Many unusual and interesting scenes. (Jr. High through College)

PLANTATION SYSTEM IN SOUTHERN LIFE (CORONET)

10 minutes—sound $1.80 3

Social and economic development of a cultural pattern is traced visually by this motion picture. Life on a typical southern plantation is recreated so that historic scenes can be related clearly to their modern counterparts. The film presents information on the organization of a plantation; economy as dominated by one crop—cotton; effects of the Civil War on the economy and the heritage of all these on life in the South today. (Elementary)

PLANTER OF COLONIAL VIRGINIA (EBF)

11 minutes—sound $1.80 3

Recaptures representative phases of life in Colonial Virginia. Shows Williamsburg as the political and social center of the colony; the roles of the slaves; indentured servant, and artisan; methods of manufacture and means of transportation; architecture; social customs; and music of the period. (Elementary through Adult)

PLAY BALL, SON (FORD)

17 minutes—sound $1.20 2

Based on the book of the same title by Bert Dunn. This film includes action and slow motion shots covering all activities on the diamond. The youngsters in the film are 13- and 14-year-old students of Dunn's who have been instructed in his teaching theories. Joe Cronin appears in the film, coaching the boys. (Elementary through Adult)

Unit Value

PLAY IN THE SNOW (EBF)

10 minutes—sound $1.80 3

Shows boys and girls playing such snow games as fox and geese and building snow men. Emphasizes freedom and healthfulness of group playing in the snow. (Elementary and Jr. High)

PLAYGROUND SAFETY (CORONET)

11 minutes—sound $1.80 3

Planned to improve playground behavior by implanting three basic rules of the playground—see that the play space is safe, keep out of the way of other players, and learn how to play skillfully. (Primary and Elementary)

PLAYTOWN, U. S. A. (AI)

25 minutes—sound—color $1.20 2

Here is an outstanding fast-moving human interest picture that does an excellent, well dramatized job of showing how a community can organize to promote community-wide, all-age year round recreation. It presents factual and convincing pictorial evidence of what can be done when all public and voluntary agencies pool their resources to achieve a common objective. It is a colorful and entertaining story of what can happen when one individual in a community recognizes the need for public recreation facilities and a supervised recreation-for-all program and sets out to do something about it. Produced with the cooperation and technical advice of a score of America's most outstanding professional leaders in the field of recreation, this film illustrates the need for publicly sponsored recreation by emphasizing the harmful results caused by the lack of steady accessible facilities for all age groups and shows step-by-step plans for organization and development of community recreation. It subtly attacks the juvenile delinquency problem, emphasizes the necessity for providing adequate recreational opportunities and presents a visual survey of a successful recreation program in a typical American town. (Jr. High through Adult)

POLAND FOREVER (OWI)

18 minutes—sound $1.20 2

A pictorial document of the fight of democracy against invasion by the youth of Poland. The story of a nation both young and old—old in tradition of courtesy to man and reverence for God, and young in heroic dedication to the building of a new state. Traces the history of Poland from the fifteenth century to the present and outlines events leading up to the invasion. (Jr. High through Adult)

POLICEMAN, THE (EBF)

10 minutes—sound $1.80 3

Describes the function of police officers in general and follows a typical city patrolman through one of his regular shifts of duty. In due course, the use of motorcycles and patrol cars with two-way radio communication is demonstrated and explained. Lessons in pedestrian and vehicular traffic safety are developed, along with the role of the policeman in rescue work and the apprehension of a speeding driver. (Primary through Jr. High)

Unit Value

POLITICAL PARTIES (CORONET)

11 minutes—sound $1.80 3

Designed to show the relationship of political parties to the individual, and to show that the institution of parties is dependent upon popular approval. The work of party mechanics is illustrated and the way parties keep good-will. The relationship of local party activities to national measures is explained, as well as democratic voting procedures. (Elementary through Adult)

POMPEII AND VESUVIUS (EBF)

10 minutes—sound—color $3.60 6

Using technicolor photography to tell its pictorial story, the film suggests the dramatic contrast between the past and present life of cities near Mt. Vesuvius and the ever-present threat of the volcano itself. Opening on a sequence which portrays the still living volcano, the film suggests by means of extant ruins the ancient destruction of the city of Pompeii. A colorful native dance of the present contrasts with the lifeless ruins of yesterday but always with Mt. Vesuvius in the background as a reminder of a threat not yet removed. (Jr. High through Adult)

POND INSECTS (EBF)

11 minutes—sound $1.80 3

Presents the diving water beetle, the mayfly, and the dragonfly, as representatives of this group of insects. Their life cycles are portrayed, as well as their food habits and struggle for existence. We see a diving beetle lay its egg; a water beetle larva attacking a large tadpole; the mayfly molting after acquiring wings; the mayfly hiding from its enemies; and the remarkable mask of the dragonfly nymph. (Jr. High through Adult)

POND LIFE (EBF)

10 minutes—sound $1.80 3

Depicts the pond as an organized community in which plants and animals are dependent upon each other, and points up conditions which are necessary for life in the pond. Portrays representative animals living at various levels of the water and explains why they live at those levels. Shows animals which lie upon one another and thus keep the population of the pond in balance. (Primary and Elementary)

POP RINGS THE BELL (NSS)

23 minutes—sound $1.20 2

This dramatic, convincing story of progress in education is designed to show that education is an investment. Opening with a back-to-school party, the film shows how the educational leaders overcome their opposition and become more progressive. Fine for P.T.A. and community school groups. (Adult)

PORK ON THE FARM (USDA)

22 minutes—sound $1.20 2

Hog killing time in Georgia! Luscious sugar ham, fine chops, and crisp bacon tantalize us in the opening scenes of the film. We are introduced to the best methods of killing and curing pork on the farm. We are shown how the government has assisted the

Unit Value

hog producers by teaching them to butcher their own hogs. Various curing methods are shown. (Sr. High through Adult)

PORTUGAL (MOT)

12 minutes—sound $1.80 3

Shows with objectivity the status of education, labor and industry in this country whose future role among the nations of the world is still undetermined. Impressive sequences are given of the religious pageantry of a country devotedly linked to the Roman Catholic Church. (Jr. High through Adult)

POSTURE AND EXERCISE (EBF)

10 minutes—sound $1.80 3

Explains muscle activity and the physiology of exercise. Concepts presented include the relation of the nervous system to the skeletal muscles, motor units of work, development of endurance, muscle tonus in relation to posture, and peripheral circulation as it related to general physical efficiency. (Jr. High through Adult)

POSTURE AND LOCOMOTION (EBF)

10 minutes—sound $1.80 3

Deals with the steps by which the infant advances from a helpless state of immaturity in which he only kicks and wriggles to the stage where he is able to change position and posture at will. Presents a study of these phases of the child's development from the age of 8 to 80 weeks. Thirteen age levels are portrayed in a consecutive biographic series. (Sr. High through Adult)

POTASH IN SOUTHERN AGRICULTURE (POT IN)

20 minutes—sound—color $1.20 2

Covers fertilization and potash deficiency symptoms of cotton, tobacco and corn at several Experiment Stations in the South, also crops in the field, fertilizer placement work, and scenes in a fertilizer factory. (Jr. High through Adult)

POTASH PRODUCTION IN AMERICA (POT IN)

40 minutes—sound—color $1.20 2

Shows the location and formation of American deposits and scenes of mining and refining of potash in California and New Mexico. (Jr. High through Adult)

POTTERY MAKING (EBF)

11 minutes—sound $1.80 3

Shows a professional potter at work mixing clay preparatory to centering it on a wheel shaping, trimming, and preparing it for firing. An Indian bowl is constructed by the ancient method of building up and shaping coils of clay, on which a primitive design is later added. Use of a plaster cast in the molding of duplicate pieces is demonstrated. The art of making angular shaped pottery cementing slabs together; also methods of decorating and firing; techniques of applying glazing slip by dipping, brushing, spraying and pouring. (Elementary through Adult)

POULTRY—A BILLION DOLLAR INDUSTRY (USDA)

28 minutes—sound $1.20 2

Unit Value

The magnitude of the poultry industry and how it is conducted are shown in this film. Scenes include poultry farms, hatcheries, poultry dressing and handling of poultry products. (Jr. High through Adult)

POULTRY ON THE FARM (EBF)

10 minutes—sound $1.80 3

The appearance and habits of adult and young chickens, ducks, geese, and turkeys are presented in this film. Includes such subjects with their natural sounds, as chickens, roosting, feeding and drinking; comparative appearance of hen and rooster; brooder house and chicks; gathering of eggs; incubation of eggs; egg embryos; chicks hatching; ducklings just hatched on outdoor nests; ducklings feeding and diving in water; goose, gander, and goslings. (Primary through Jr. High)

POWER AND THE LAND (USDA)

39 minutes—sound $1.20 2

In 1939 the Rural Electrification Administration produced one of the government's most notable documentary films. Deals with the economic and social significance of rural electrification. (Sr. High through Adult)

POWERING AMERICA'S PROGRESS—A Modern Story of Bituminous Coal

25 minutes—sound—color $1.20 2

Presents the highlights of the bituminous coal industry, from the mining of the coal by the most up-to-date equipment through the washing and market preparation stages and distribution, to its many uses in power plants, steel making, factory and home. Also shows the demonstration plant at Louisiana, Mo., where the Bureau of Mines is making synthetic liquid from coal and the underground gasification project being conducted at Gorgas, Alabama, by the Bureau in cooperation with a utility company. (Sr. High through Adult)

POWERS OF CONGRESS (CORONET)

10 minutes—sound $1.80 3

Mr. Williams dropped off to sleep for only a few moments to find himself confronted with a chaotic world in which Congress had been suspended. It was a nightmare—fantastic, weird, unbelievably confusing. He awoke with a new understanding of Congressional powers and his own responsibility in the selection of his representatives. (Jr. and Sr. High)

PRACTICING DEMOCRACY IN THE CLASSROOM (EBF)

21 minutes—sound $3.00 5

This film makes the point that the teaching of good citizenship in schools can be done more effectively through democratic methods than through laissez-faire and authoritarian methods. It demonstrates what is meant by "democratic teaching techniques" by showing students in an up-to-date classroom being taught by the democratic method. (Jr. High through Adult) (Social Studies)

PRACTICE MAKES PERFECT DRIVERS (GM)

11 minutes—sound $1.20 2

Unit Value

Demonstrations of several driving skills which enable the expert driver to avoid trouble under difficult conditions. Emphasis is placed on the need for constant practice to develop these skills. Specific points covered include driving on steep grades, control on rough roads, handling a car when it skids, maintaining control in case of a blowout, action on the approach of emergency vehicles and handling the problem of headlight glare. (Sr. High through Adult)

PRAIRIE PROVINCES OF CANADA (EBF)

10 minutes—sound $1.80 3

Manitoba, Saskatchewan, and Alberta—Districts of Mackenzie, Keewatin, and Franklin. This is one of the leading grain-growing regions of the world, wheat being the principal crop. (Elementary through Adult)

PREFACE TO CHEMISTRY (EBF)

16 minutes—sound $3.00 5

An introduction that surveys examples of human achievement dependent upon chemistry. Provides a brief description of our chemical heritage including the work of Priestley and Lavoisier. Introduces three basic areas of chemistry—inorganic, organic and physical—shows how these lead to applications that are widely beneficial. Interesting experiments concerning chemical change, electrolysis, conductivity, and analysis are shown. Describes how the work of modern chemists contributes to a higher standard of living. (High School) (Chemistry)

PREFACE TO PHYSICS (EBF)

15 minutes—sound $3.00 5

Opening on historic Mt. Vernon, the film compares the progress made in science before Washington's time with the tremendous advances since then. The important role of physics is identified, and significant divisions of physics are indicated—mechanics, heat, sound, light, magnetism, and electricity. A series of demonstrations highlight the work of several great physicists, and a number of experiments illustrate the contents of beginning physics course. (High School)

PREHISTORIC TIMES: THE WORLD BEFORE MAN (CORONET)

10 minutes—sound $1.80 3

The dramatic sweep of two billion years of prehistory—from the formation of the earth to the coming of man. Each of the five great geological eras is presented according to its most important geological and biological developments. Actual fossil remains, examples of terrain, and realistic models of prehistoric plants and animals are interwoven to establish the broad impression of the earth's transformation and the accompanying changes in life. (Jr. High through Adult)

PRESIDENTIAL ELECTIONS (EBF)

15 minutes—sound $3.00 5

Describes the process of electing a President of the United States, emphasizing it as the most significant event in American political life. Dynamic and graphic charts and a wealth of photographic material describe recent campaigns. The film analyzes the struc-

Unit Value

ture and strategy of presidential campaign organizations and the major political moves involved in the nomination and election of a President. (Jr. High and Adult) (Problems of Democracy)

PRESIDENT'S CABINET (CORONET)

10 minutes—sound $1.80 3

Relationship of the President's cabinet to everyday life situations and to other functions of our government is shown in this important civic production. Functions of the cabinet and the executive departments are outlined and the general development of the cabinet is reviewed. (Jr. and Sr. High)

PRIDE, THE SADDLE HORSE (EBF)

10 minutes—sound $1.80 3

After showing the role of the horse in modern life, the film follows the development and training of a colt from one week to three years of age in the Blue Grass country of Kentucky. Feeding, training, etc. (Primary through Sr. High)

PRIMARY CELL, THE (EBF)

10 minutes—sound $1.80 3

Photographic scenes demonstrate several phenomena of cells. Animated drawings explain in detail the operation of the dry cell in terms of electron action including ionization of the electrolyte, electron flow through circuit, action at electrodes, polorization and depolarizer. Demonstrations reveal the operating characteristics of a cell and of several cells (or battery) in both series and parallel connections. (Sr. High and College)

PRINCE EDWARD ISLAND (NFB)

10 minutes—sound—color $1.20 2

"Abegweit," as the Indians called Prince Edward Island is largely agricultural. Large farms produce the island's main crop, potatoes. Many of these are run on a cooperative basis. The climate is suited to the growing of all types of cereals and fruit. However, there is also some sheep breeding, hog and cattle farming and fur breeding. Lobster, herring and mackerel are fished. The people of the Island, descended from Scotch and English settlers, are ardent readers and are serviced by traveling libraries. The film ends with a panorama of Charlottetown, the capital. (Jr. High through Adult)

PRINCIPLES OF BAKING (EBF)

11 minutes—sound $1.80 3

Explains the factors involved in the making of baked products. It shows that all baked products or flour mixtures have a common ingredient—flour. To this framework are added other ingredients dependent on the kind of product desired. The factors described in the film are (1) leavening agents, (2) methods of combining ingredients, and (3) oven temperature used. Presents the step-by-step process of baking bread, pastries, and cakes. Close-ups show the methods of mixing the ingredients. The action of one ingredient upon the other is explained. (Jr. and Sr. High)

Unit Value

PRINCIPLES OF COOKING (EBF)

11 minutes—sound $1.80 **3**

Explains the changes that take place in meats and vegetables upon the application of heat. Methods of cooking meats and vegetables demonstrated include boiling or cooking by direct contact with water; using the double boiler or cooking by indirect steam; using the steamer cooker and the pressure cooker or cooking by direct steam; deep frying; pan frying; broiling; braising; and baking or roasting. (Jr. High through Adult)

PRINCIPLES OF HOME CANNING (EBF)

10 minutes—sound $1.80 **3**

Shows the steps in food canning that involve operation of scientific principles—bacteriology; sterilization, timing and hermetic sealing as demonstrated in the boiling water bath and pressure cooker processes. Food spoilage agents are described by microphotography; the various reactions of bacteria to heat, by animated drawings. (Jr. High through Adult)

PRINCIPLES OF REFRIGERATION (KB)

10 minutes—sound $1.80 **3**

An excellent film study which deals with discovery and development of refrigeration—shows the application of its principles in commercial and household uses for the preservation of food, and clearly presents a concise story of this modern necessity. (Jr. High through College)

PRINCIPLES OF SCALE DRAWING (CORONET)

10 minutes—sound $1.80 **3**

Wherever things are built scale drawings are the language of construction. Jack, Gil and Helen are building a booth for the Charity Fair. In solving their basic problems they instruct us in the skills and interpretation of scale drawing. (Jr. and Sr. High)

PRINTING THROUGH THE AGES (EBF)

13 minutes—sound $2.40 **4**

Traces the story of printing from ancient times to the present day. Shows early methods of reproducing pictures by means of carved wood blocks and depicts the gradual transition from printing of pictures to printing of letters. Includes sequences illustrating Guttenburg's contributions to printing. Shows evolution of modern type face and improvements in paper on which to print. Suggests the impact of the Industrial Revolution on printing and concludes with scenes of modern book and newspaper presses in operation. (Elementary through Adult)

PROBLEMS OF LIGHT (EBF)

11 minutes—sound $1.80 **3**

Describes the use of the plane's controls in taking off, climbing, banking, stalling, spinning and recovery, diving, gliding and landing. Superimposed animated diagrams help to clarify the action of forces acting on the plane while executing these maneuvers. (Elementary through Adult)

Unit Value

PROBLEMS OF HOUSING (EBF)

11 minutes—sound $1.80 3
Shows standards for pleasant and healthful housing, and demonstrates simple, practical ways of modernizing our homes to conform to these standards. Stresses protection from weather, adequate light, safety, beauty and freedom from insects. (Sr. High through Adult)

PRODUCTION OF FOODS (EBF)

10 minutes—sound $1.80 3
Presents authentic material concerning the technology and geography of food production. Photographic and animation sequences depict the role of land in production; the methods employed in the production of plant and animal products; and the relation of animal food production to plant foods. Problems concerning the increase in world production of foods are posed and possible solution suggested. (Elementary through Adult)

PRODUCTIVITY: KEY TO PLENTY (EBF)

20 minutes—sound $2.40 4
Explains vividly and dramatically how we in America have attained the world's highest standard of living because we have developed and learned to use machines—machines which, in turn, have enabled us to achieve a tremendous capacity for production. Warns that continued prosperity depends on our uninterrupted technological progress and on our full use of the basic sources of power. (Sr. High through Adult)

PROPAGANDA TECHNIQUES (CORONET)

10 minutes—sound $1.80 3
Chuck would like to know whether the election was really "a victory for good government," as the victorious party claimed, or just a victory for propaganda. By sharing his research, your students will learn the methods of recognizing and evaluating propaganda and will be encouraged to adopt a judicious, critical attitude toward it. (Jr. and Sr. High)

PROPERTIES OF WATER (CORONET)

10 minutes—sound $1.80 3
This film prepares students to perform and understand experiments with electrolysis, boiling and freezing points, distillation, solutions, crystallization, filtration, pressure cookery, and to analyze the properties of water, our most important compound. As a laboratory film, this subject demonstrates the characteristics of water and answers many common, but important, questions about it. (Jr. and Sr. High)

PROPERTY TAXATION (EBF)

10 minutes—sound $1.80 3
Fundamental operations in arithmetic are practically applied in a graphic exposition of the essentials of property taxation. The film portrays the social usefulness of property taxation, the types of government expenditures supported by property levies, public financing through bond issues, and procedures of levying taxes on property. Arithmetic problems involved in these ac-

Unit Value

tivities are demonstrated in a series of animated scenes. (Sr. High through Adult)

PUBLIC OPINION (EBF)

10 minutes—sound $1.80 3

Public opinion process is traced through state of tension, diagnoses and prescription, further debate to final action. Shows what effects public opinion process. Methods of measuring public opinion are illustrated, also ways of analyzing factors that influence public opinion. Defines nature of an enlightened public opinion in a Democracy. (Jr. High through Adult)

PUBLIC OPINION IN OUR DEMOCRACY (CORONET)

10 minutes—sound $1.80 3

Attitudes of citizens toward prominent issues in political and social life are a vital part of the American system. This motion picture explains clearly the importance of public opinion, shows how it is formed and determined on a significant community issue. From it students will learn the importance of their opinions and the obligation they have to express their opinions in terms of responsible action. (Jr. and Sr. High)

PUEBLO BOY (FORD)

25 minutes—sound—color $1.20 2

Tells the story of a young Indian boy being instructed in the ancient and modern ways, habits, traditions and culture of his people, the Pueblo Indians of the Southwest. It presents some Pueblo dances and ceremonies believed never to have been photographed or recorded before. (Elementary through Adult)

PUNCTUATION—MARK YOUR MEANING (CORONET)

10 minutes—sound $1.80 3

Emphasizes the importance of proper punctuation and its basic rules. Tom and Beth, showing scenes of their puppet show, find that without punctuation meanings become altered and that their puppet story cannot be understood. (Elementary through Sr. High)

PUPPETRY: STRING MARIONETTES (EBF)

10 minutes—sound $1.80 3

Accompanies a little boy as he visits a puppeteer's workshop and reveals the craftsman at work constructing one of the marionettes —carving the wooden parts, assembling the pieces, and adding the costume. Demonstrates the manipulation of marionette strings for the basic actions of walking, gesturing, nodding, and sitting. Concludes with a delightful episode from Hansel and Gretel. (Elementary and Jr. High)

PYGMIES OF AFRICA (EBF)

20 minutes—sound $3.00 5

The film depicts subsistence of Pygmy tribes living in the Congo River Region of Central Africa. Mode of living, gathering of food, hunting methods, animals native to the region, a community game hunt, and bartering processes are among the many phases of native life presented. Witch doctor mysticism is very interesting as are the native superstitions. (Elementary through Adult)

Unit Value

RAIN ON THE PLAINS (USDA)

8 minutes—sound $1.20 2
The fight to save the soil and conserve the scanty water supply on the great plains. (Sr. High through Adult)

RAINDROP SPLASH (Ind. U.)

14 minutes—sound $3.00 5
Presents the book Raindrop Splash by Alvin Tresselt with pictures by Leonard Weisgard, published by Lothrop Lee and Shephard. The Friendly Giant gets a giant umbrella from the book bag. Jerome the giraffe explains why it is bad luck to open it indoors. (Primary)

REACTIONS IN PLANTS AND ANIMALS (EBF)

11 minutes—sound $1.80 3
After first characteristizing the concepts of "stimulus" and "reaction," the film presents a study of different types of reactions in plants and animals. Directed reactions in a field of force (tropisms) are studied first; then higher reactions including reflexes and chains of reflexes lead up to a review of nervous system activity. Such reactions as geotropism, phototropism, sterotropsm, galvanotropism, and rheotropism are studied in detail. Time-laspe photography is employed to illustrate geotropism (response to gravity). (Jr. High through College)

REALM OF THE WILD

27 minutes—sound—color $3.00 5
Our national forests are great wilderness homes for America's wild-life and abundant with numerous species of colorful wild flowers. One-third of all our big game animals and myriad smaller animals and birds claim the national forests as their homes. It is commonly believed that if they are protected from the guns of hunters and snares of trappers this is sufficient to keep them healthy and happpy. This picture reveals that even more vital than game laws to our wild birds and animals is an assured year-round supply of food. Each year thousands of deer which should have been harvested by hunters are lost by winter starvation. For this reason wildlife populatons must be limited—kept in proportion to the land's productive capacity. (Primary through Adult)

RECEIVING RADIO MESSAGES (EBF)

11 minutes—sound $1.80 3
Deserbies by means of animated drawings the principles of a radio receriver. It explains the problem of turning; the capacity of the variable condenser, the inductance of the coil and resonance. The film demonstrates the need of detection and how it is achieved by a crystal. The operation of the earphone is explained together with the production of audible sound waves. (Jr. High through Adult)

RED CARPET, THE (WestonWood)

9 minutes—sound—color $3.60 6
"Inconographic" film using pictures and text from Rex Parkin's story in rhyme.

Unit Value

REFORMATION, THE (CORONET)

15 minutes—sound $2.40 4

This overview of many of the events of the period known as the "Reformation" is set among the actual sites of their occurrence. Such factors as the role of the Church in European life, the cultural rebirth brought about by the Renaissance, the emergence of national states, and new interpretations of the Scriptures are discussed. While such figures as Calvin, Zwingli, and Knox are recognized, the film devotes particular attention to Luther and the Protestant Reformation in Germany. (Intermediate, *Junior High, Senior High,* College)

REHEARSAL (AT&T)

24 minutes—sound $1.20 2

A behind-the-scenes story of a rehearsal for the Bell Telephone Hour radio program, featuring Ezio Pinza, Blanche Thebom, Donald Voorhees and the Bell Telephone orchestra. Scenes show the artists rehearsing for a broadcast, then changes to presentation of the program "on the air." The commercial announcement briefly traces the development of communciations concluding with a description of today's micro-wave radio relay system, now operating between New York and Boston. (Jr. High through Adult)

REMBRANDT (FCE)

15 minutes—sound $3.60 6

The story of drawing from the prehistoric caveman, through the Egyptian and Grecian period to the master of them all: Rembrandt. This picture was filmed in co-operation with the government of Holland and the original paintings are photographed for the first time on the screen. Shown are: "Descent From the Cross," "The Good Samaritan," "Lesson in Anatomy of Prof. Tulp," "Draper Guild," "Portrait of His Mother" and other world famous paintings shown in detail and intelligently explained. (Jr. High through Adult)

REMNANTS OF FRONTIER LIFE (HARTLEY)

20 minutes—sound $1.20 2

This film presnts a day in the life of a typical family of the southern highlands. It shows the conditions under which they live and work. (Jr. High through Adult)

RENAISSANCE (CORONET)

10 minutes—sound—color $3.60 6

The Renaissance was more than an historical period. It represented a mental attitude and a human spirit. It is this spirit which the film evokes in a wealth of colorful, authentic images. From Galileo's telescope to Leonardo's notebooks, from the Medici Palace in Florence to St. Peter's Cathedral in Rome, your students will experience something of the science, the literature, the arts, and above all, the driving spirit of human endeavor that gave us the Renaissance. (Jr. and Sr. High)

REPORT FROM RUSSIA (OWI)

7 minutes—sound $1.20 2

Shows the strength of Russia—not the guns and tanks and planes, important as they are, but the people of Russia—19,000,000 women

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planting and harvesting crops, 5,000,000 women in industry, 5,000,000 children on farms, anti-aircraft batteries blasting Nazi raiders from the sky over Moscow, while women and children calmly seek safety in the subway. (Sr. High through Adult)

REPORT TO THE AMERICAN PEOPLE ON TECHNICAL COOPERATION (FOA)

27 minutes—sound $1.20 2

This film was made to show the people of the United States the purposes, functioning, and achievenments of the Technical Cooperation programs of the Foreign Operations Administration. This is a film all Americans should see that they might better understand why and how their government is helping underdeveloped nations of the world obtain higher standards of health, education, agriculture, production, and public administration.

REPRODUCTION AMONG MAMMALS (EBF)

10 minutes—sound $1.80 3

Actual photography, animated drawings, microcinematography, and three-dimensional animations are used in presenting the story of embryology. The domestic pig was chosen for the purpose of illustration. The story is fundamentally complete from the formation of the original newborn pig, including such processes as fertilization, cleavage, blastulation, gastrulation, formation of neural folds, development of membrants and embryonic circulation and parturition. (Jr. High through College)

THE RESCUE OF AMERICAN PRISONERS AT SANTO TOMAS (YA)

27 minutes—sound—black and white $3.00 5

On February 3, 1945, victorious American Troops re-enter the Philippines. (Sr. High through Adult)

RESPONSIBILITY (YA)

12 minutes—sound $1.80 3

Dramatizes the story of a high school boy who finds difficulty in meeting and carrying through his responsibilities. (Elementary through Sr. High)

RESURRECTION (FF)

12 minutes—sound $1.80 3

The tragic and brave story of the French people from 1940 to 1943 is told through official scenes of the terrible days of blitz and invasion, followed by the courageous efforts of the fighting forces to redeem the spirit of France. (Jr. High through Adult)

REWARD UNLIMITED (OWI)

10 minutes—sound $1.20 2

The great need for Cadet nurses is dramatized in this film. When Peggy's fiance goes off to war, she joins the U. S. Cadet Nurses Corps. The picture takes us through her training as student nurse and shows the rewards that come from a war job well done. (Jr. High through Adult)

RHYTHM AND PERCUSSION (EBF)

12 minutes—sound $1.80 3

Eugene Kash explains to an audience of eager youngsters the

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fundamentals of rhythm and introduces the percussion instruments. An old Indian tom-tom is compared with modern drums, and a children's rhythm band performs under the direction of a diminutive leader. Final scenes in music classes show how teachers capitalize on the interest stimulated by the concerts. (Primary and Elementary) (Music)

RHYTHMS: INSTRUMENTS AND MOVEMENTS (EBF)

10 minutes—sound $1.80 3
A demonstration of rhythm activities in the primary grades. Tells the story of a second grade class which learns to make its own instruments and create its own rhythms after seeing the Indian dances of Chief Thundering Hill. (Primary)

RICE AND BULLS (AFFlms)

17 minutes—sound $1.20 2
In southern France, in the district of Camargue, the farmers have formed a cooperative that enables them, through E.C.A. funds to improve the yield of their rice fields. American machinery was needed to flush fresh water from the Rhone into their paddies. A neighboring cattleman looks on in distaste until he discovers that the first rich harvest, as well as helping materially all his neighbors, has been important to him also. (Jr. High through Adult)

RIGHT OF WAY (OWI)

7 minutes—sound $1.20 2
Shows how America's transportation lines now head straight for the battlefront. This may mean that your train will be late, that your car will be stored, that you won't have packages delivered, that you won't get a seat on the plane. Shows a troop train, a freight train, and a heavily laden truck rushing loads to a convoy slated to sail soon. They have the right of way and they deliver the goods on time. (Jr. High through Adult)

RIGHT OR WRONG: MAKING MORAL DECISIONS (CORONET)

10 minutes—sound $1.80 3
A gang of high school boys break a warehouse window; one of them is caught. The moral decisions of the watchman, the boy's mother, the property owner, the police sergeant, a social worker, and the boy are highlighted to motivate thinking and discussion. (Jr. and Sr. High)

RIKKI—THE BABY MONKEY (EBF)

10 minutes—sound $1.80 3
Tells the charming story of a mischievous little monkey and his family in their native jungle habitats. Remarkable real-life photography reveals what Rhesus monkeys like to eat, how mother monkey cares for her baby, what monkeys like to eat, how they spend their time in the jungle, and how young monkeys like to climb and play. (Primary and Elementary)

RIVER, THE (C)

30 minutes—sound $1.80 3
One of the outsanding social documents of our times. The great Mississippi River system has influenced the land and people over

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two-thirds of our country. Unfortunately, in the haste of economic expansion, these waterways and the surrounding forests and farms have been ruthlessly misused and have led to great human suffering. Shows the devastation resulting from cut-over forests—relentless floods with loss of lives and property. Offers some suggestions for improving the Mississippi Basin and for preventing future waste. The story is told by an unusual combination of images, words, and musical score, resulting in a highly stimulating film. (Elementary through Adult)

ROAD TO BOOKS (SVENCK FILM INDUSTRIES)

17 minutes—sound $1.20 2

Depicts the Swedish Library System, showing the services of the Library and how it can affect the lives of all the people. (Junior High through Adult)

ROAD TO GASPE (NFB)

11 minutes—sound—color $1.20 2

The scenic beatuies of the Gaspe peninsula are enjoyed by a group of Youth Hostlers. On their bicycles they travel down this famous resort district of Canada. (Elemnetary through Adult)

ROADS SOUTH (OIAA)

20 minutes—sound $1.20 2

Pictures in an interesting and educational manner the varous means of transportation in Latin-American countries. (Jr. High through Adult)

ROBIN RED BREAST (EBF)

11 minutes—sound $1.80 3

The dramatic story of a robin family from the time father and mother robin build their nests until the baby robins are old enough to take care of themselves. (Primary through Jr. High)

ROCKY MOUNTAIN TROUT (NFB)

14 minutes—sound—color $1.20 2

The turquoise lakes and foam-fleckled streams of Jasper National Park hold rich treasure for the fly-fisherman. The film reviews the attractions of a mountain holiday from the angler's point of view. We are shown the skill, excitement and rewards of a day in the mountains as fishermen follow the lure of the rainbow, speckled, brown and cutthroat trout. The care taken by the National Parks Service to ensure that waters are well-stocked is illustrated. (Elementary through Adult)

ROMANCE OF SILVER DESIGN, THE (REED AND BARTON)

27 minutes—sound—color $1.20 2

This film tells the story of silver and how much it has meant to mankind from its first discovery thousands of years ago up through the great civilizations of today. It traces the origin of some of today's best loved sterling designs and shows not only how silverware was used in the past, but also how sterling should be used and cared for today. (Jr. High through Adult)

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ROME, CITY ETERNAL (EBF)

10 minutes—sound—color $3.60 6
Concentrating primarily on extant ruins, statuary, architecture and the art preserved in St. Peter's, this film highlights important aspects of the significance of Rome through the ages. The film might be described as a "camera portrait" of the past and present glory of Rome. (Jr. High through Adult)

ROMEO AND JULIET (TFC) (See regulations—last page)

40 minutes—sound $4.80 8
Limits itself to those sequences which deal with the love story of Romeo and Juliet from the time the two families, the Montagues and Capulets, enter the cathedral in Verona through the first meeting of Romeo and Juliet at the Capulet ball and the final scene at Juliet's tomb. (Jr. High through College)

ROOTS OF PLANTS (EBF)

11 minutes—sound $1.80 3
Presents examples of tap, fascicled and fibrous roots, and treats their structure and function. Microphotography makes visible the passage of a root through the soil and the movement of protoplasm in a root-hair. An osmosis experiment is demonstrated. The formation and storage of starch and sugar are explained. (Jr. High through Adult)

ROUGH TURNING BETWEEN CENTERS (C)

12 minutes—sound $1.20 2
The procedures followed in setting up an engine lathe for a rough turning job between centers, on a piece already cut to length and centered. Safety precaution in dress and work, necessity of constant reference to blueprint, lubrication of machine, care of centers, and proper use of various controls on the lathe. (Sr. High through Adult)

RUBBER LENDS A HAND (FFFd)

28 minutes—sound ..... return postage
The story of rubber on the farm. The film shows the wide range of usefulness of rubber in easing the work of modern farmers, and visualizes the most advanced farming ideas. (Elementary through Adult)

RUBY THROATED HUMMINGBIRD (CORONET)

8 minutes—sound—color $2.40 4
Even when half grown the young hummingbird hardly fills a teaspoon. His diminutive, lichen-covered nest, where the pea-sized eggs are hatched, so nearly resembles a part of the tree that it is seldom discovered. But here our camera has found the darting bird and caught him in his most characteristic activities. (Elementary)

RULES AND LAWS (EBF)

14 minutes—sound $1.80 3
Designed to help boys and girls understand the purpose of laws in our society this film demonstrates that laws in the community are like rules in children's games. A group of youngsters is first brought to realize that having rules and abiding by them makes

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playing together enjoyable for all. Then they consider certain specific laws which have benefitted the people of their community—thus making community life more enjoyable for all. (Grades 3 through 6)

RUMPELSTILTSKIN (CORONET)

10 minutes—sound $1.80 3

Here is a simple, intriguing story of the strange little man who lost his temper. Your audiences will eagerly follow the adventures of the fair Juliana and her task of spinning straw into gold. (Primary)

RURAL LIFE OF MEXICO (CORONET)

10 minutes—sound—color $3.60 6

Highlights of the film include scenes of primitive agricultural practices, laundering as carried on in mountain streams and primitive communal stone tubs, home life, regional costumes and two colorful sequences depicting traditional dances. The film closes with a visit to a quaint and colorful fishing village on Lake Patzcuaro. (Elementary through Adult)

RX: STORY OF YOUR PRESCRIPTION (SQUIBB)

20 minutes—sound $1.20 2

Highlighting in this non-technical documentary picture are the painstaking care and ceaseless research of the modern pharmaceutical industry for new and better methods to bring within the reach of all, at minimum cost drugs which relieve suffering, restore health and prolong life. The film touches briefly on the use of vaccines and toxoids for immunization, the development of ether manufacturing, the discovery and use of insulin for diabetes, tho application of the arrow poison curare, in surgery, the manufacture of streptomycin and the use of science's new electron microscope which makes visible miscroscopic particles never before studied by the human eye. (Jr. High through Adult)

SAFE DRIVING: FUNDAMENTAL SKILLS (CORONET)

10 minutes—sound $1.80 3

Preliminary to Tom's driver's license examination, his father demonstrates the skillful procedures of: getting the car ready, starting the motor, driving forward, stopping, backing, turning, signaling and parking. Later, Tom passes his test for his driver's license and is ready to do his share of driving on their coming vacation. (Jr. and Sr. High)

SAFE LIVING AT SCHOOL (CORONET)

10 minutes—sound $1.80 3

Ted and Ruth were elected to the Junior Safety Council. We go with them on an informative "Safety Tour" to see the safety features of their school and to learn what students can do at school to live safely. By emphasizing courtesy, good housekeeping, skillful and correct actions, this film clearly shows the proper concept that make *Safe Living at School* a secure reality. (Elementary)

SAFE LIVING IN YOUR COMMUNITY (CORONET)

10 minutes—sound $1.80 3

How school children can work together to lessen the accident rate

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of a community is presented by following three guideposts: good housekeeping, good citizenship and good safety. This motion picture shows how students can work through the school and community safety council to form an effective safety program. (Elementary)

SAFE USE OF TOOLS (CORONET)

6 minutes—sound $1.20 2

Children need their own tools, and must learn how to use them. Shows proper methods of using scissors, knives, hammers, saws, and other small tools and the care of them. (Primary)

SAFEGUARDING MILITARY INFORMATION (OWI)

10 minutes—sound $1.20 2

Stresses the importance of secrecy on the part of military personnel and workers engaged in defense activities. (Jr. High through Adult)

SAFETY IN THE HOME (EBF)

11 minutes—sound $1.80 3

Designed to awaken interest in the need for safe homes. First the film tells of the frequency of home accidents and of the number of persons thus injured each year. Then one family's campaign to eliminate accidents in their home is shown in detail. Many safety devices, including those for the garage, workshop, stairs, playroom, bedroom, and kitchen are included. (Elementary and Jr. High)

SAFETY ON THE STREET (EBF)

10 minutes—sound $1.80 3

Designed to encourage important habits of safety on the way to and from school, this film employs the activities of a school patrol to illustrate street safety precautions. It points up such aspects of street safety as the correct way to cross streets, safe and unsafe crossings, and shows how policemen, patrol members, traffic lights, and stop-signs aid the pedestrian as well as the motorist. (Primary and Elementary)

SAFETY ON THE SCHOOL BUS (YA)

10 minutes—sound $1.80 3

Designed to promote greater safety on the part of those who ride the school bus. Demonstrates safe practices for all school bus riders, both on and off the bus, with emphasis on safe conduct on the bus. (Elementary and Jr. High)

SAFETY TO AND FROM SCHOOL (YA)

10 minutes—sound $1.80 3

Safety is introduced as an adventure by dramatizing the natural experiences of a boy and girl to and from school. Develops practices of street crossing techniques by having class practice. Emphasizes value of safety patrol and helpfulness of police. Teaches how, when and where to cross the street. (Primary through Jr. High)

SAILING A TOY BOAT (EBF)

7 minutes—sound—color $1.80 3

Frank is thrilled over the bright new toy sailboat his father has

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given him. He learns how to set the rudder, so that his boat will come back to him when it sails far out on the pond. Jean's doll is the boat's passenger. When the waves wash her overboard, it is brave Penny who swims to Dolly's rescue and brings her safely back to Jean. (Primary-Elementary)

SAILING IN CANADA (NFB)

11 minutes—sound—color $1.20 2

The thrill of sailing as it is enjoyed in Canadian waters from the Atlantic to the Straits of Georgia, on the Pacific Coast. To the rollicking accompaniment of sea chanties, the film takes us cruising up the St. Lawrence, on the Great Lakes, in Muskoka waters, on Lake Winnipeg and off Canada's Pacific coast. Popular types of sailboats are shown in action, and we catch glimpses of famous races. (Elementary through Adult)

SAO PAULO (OIAA)

20 minutes—sound $1.20 2

An interesting study of progress in Brazil's second largest city, one of the fastest growing cities in the world. Here we see a cross-section of the modern South America with its busy industry, its growing commerce, its beauty of art and architecture, and its up-to-date trends in education. (Elementary through Adult)

SAVE THE SOIL (USDA)

10 minutes—sound $1.20 2

A general discussion of the problem of soil conservation. Shows the part that soil has played in history. (Sr. High through Adult)

SAVE THOSE TEETH (EBF)

10 minutes—sound $1.80 3

Emphasizes the importance of proper cleansing in the care of teeth, and illustrates how the teeth are affected by excessive use of refined sugar. Identifies the kind of bacteria that change sugar to acid in the mouth. Demonstrates the use of sodium fluoride solution in the prevention of tooth decay and prescribes specific rules to be followed in the care of teeth. (Elementary through Adult)

SCANDINAVIAN LANDS: NORWAY, SWEDEN, DENMARK (CORONET)

10 minutes—color—sound $3.60 6

An introduction to the geography, the people, and the life of the three Scandinavian countries—Norway, Sweden and Denmark. This film promotes an understanding of how the peoples of each country have utilized the resources of mountain, plain and sea in the development of agriculture, industry, trade and recreation, resulting in one of the highest standards of living on the European continent. (Intermediate, Junior High)

SCHOOL ACTIVITIES AND YOU (CORONET)

10 minutes—sound $1.80 3

A high school girl is planning her school activity program. Through the advice of her older brother, she learns the importance of choosing activities for their values by considering what she can learn, what her interests are, how much time she can give, and how to arrange a well-balanced program. (Jr. and Sr. High)

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SCHOOL AND COMMUNITY (McGRAW-HILL)

27 minutes—sound $3.00 5
Shows how communities can give students vocational training. (Sr. High through Adult)

SCHOOL THAT LEARNED TO EAT (GEN. MILLS)

22 minutes—sound—color $4.20 7
How a Southern school developed a better school lunch program. Teachers discuss problems at a faculty meeting with state nutritionists. Community meeting of parents and teachers plan survey of nutritional habits of children. Plans are made, whole community works in fund-raising, parents help re-build lunchroom, children share in planning work. (Jr. High through Adult)

SCHOOLHOUSE IN THE RED (KFD)

42 minutes—sound—color $1.20 2
Deals with the sociological and psychological factors involved when small communities face up to the problem of joining their school district into a larger unit. (College and Adult)

SCHOOLS TO THE SOUTH (OIAA)

12 minutes—sound $1.20 2
Gives an accurate picture of the educational systems now operating in the other American republics. (Elementary through Adult)

SCIENCE AND AGRICULTURE (EBF)

11 minutes—sound $1.80 3
Reveals the interdependence of science and agriculture in our modern life. Traces the soybean from its cultivation in China through its culture and use in the United States. Describes the plant's characteristics and its value to soil conservation. Reproduced conversations treat problems of its cultivation and harvest. Process of extracting soybean oil and preparation and use of soybean by-products in home and industry are shown. (Elementary through Adult)

SCIENCE AND SUPERSTITION (CORONET)

11 minutes—sound $1.80 3
This film reflects a changing point of view in the philosophy of science education—it is intended to teach pupils how to use the scientific method in thinking. It is shown that the superstitions about the groundhog, the rabbit's foot, etc., are all inaccurate. (Elementary and Jr. High)

SCIENCE OF SOAP (EBF)

11 minutes—sound $1.80 3
A simple laboratory demonstration first illustrates how lye and fat are combined to make soap, and animated drawings clearly explain the chemical action (saponification) which takes place when the mixing occurs. Other drawings describe the cleansing action of soap. (High School) (Chemistry)

SCIENTIFIC METHOD (EBF)

11 minutes—sound $1.80 3
Explains the elements of the scientific method, demonstrates the way this method of problem solving is applied by scientists and

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discusses the value of scientific thinking in dealing with problems of everyday life. The film features one of the most dramatic stories of modern science—the discovery of penicillin by Sir Alexander Fleming. It draws likewise, on the work of Louis Pasteur in illustration of the contributions of scientific thinking to modern knowledge. (High School and Adult) (Physical Science)

SEASHORE LIFE (EBF)

10 minutes—sound—color $3.60 6

Provides an experience in ecology through a portrayal of life on the three important kinds of seashores—the sandy beach, the rock pool, and the mud flat. Shows ways in which representative seashore animals are adapted to survive in their special environments and how they feed, move and compete with other kinds of animal life with which they come in contact. (Primary and Elementary)

SEASIDE HOLIDAY (NFB)

10 minutes—sound—color $1.20 2

Prince Edward Island holds much of Canada's history in its shores. The National Park is reached by way of Charlottetown where the film pauses to honor the Fathers of Confederation who gathered there in 1864. Family picnic parties gather in woodland glades. (Elementary through Adult)

SEASONAL CHANGES IN TREES (CORONET)

10 minutes—sound—color $3.60 6

Compressed into a few minutes of film time and brought conveniently into your classroom, this picture presents the seasonal story of the changes in trees. It is an excellent introduction to scientific study of trees. (Elementary)

SECRETARY'S DAY (CORONET)

10 minutes—sound $1.80 3

In a secretary's day, she assumes many responsibilities . . . taking dictation, transcribing, making appointments, receiving callers, planning an employer's itinerary and securing his reservations. Here we see her demonstratng the specific office technques, beyond a knowledge of typing and shorthand, that distinguish her from a stenographer and make her indispensable to her employer. (Sr. High)

SECRET MESSAGE THAT PLUNGED AMERICA INTO WORLD WAR I, THE (YA)

27½ minutes—sound $3.00 5

On March 1, 1917, American newspapers reported the intercepted telegram from the German Foreign Minister to the German Ambassador to Mexico, which stated Germany's decision to begin unrestricted submarine warfare and proposed a German-Mexican alliance should the U.S. enter the war. Mexico was promised the chance to reconquer Texas, New Mexico, and Arizona. Washington statesmen are interviewed, and opinion is divided. The telegram unified public sentiment, however, against the Central Powers. (Junior High through Adult)

Unit Value

SECRETS (USN)

4 minutes—sound $1.20 2

This film asks of the enemy the question, "What would you have given to know?" and then pictures in some detail the use of radar aboard ship to locate enemy targets, and of a new type flashlight used to spot the objectives of attack. It also pictures the explosion of the atomic bomb, refers to the work done at Oak Ridge, speaks of the new uses of atomic energy, and promises that after World War II Americans will never again be unprepared. (Elementary through Adult)

SECTION 16

13½ minutes—sound $1.00

The nation's long and often disappointing quest for satisfactory schools is traced with bold strokes in the historic film, *Section 16.* Authentic settings and costumes recapture the spirit of colonial America and of the periods of pioneering and expansion through which we have passed. Out of this background today's major problems in education are brought into focus, especially the current shortages of classrooms and teachers. Solution of these problems in the traditional American way, through citizen interest, concern, and intelligent action, is identified as the unfinished business of this generation.

SEE BETTER: HEALTHY EYES (CORONET)

10 minutes—sound $1.80 3

How can we take care of our eyes? Why should we take care of them? In answering these two basic questions, this film explains the general structure of the eyes, the important health and safety practice relating to eye care and the common ways to treat disorders of vision. The film has been viewed and approved by representatives of various professional groups interested in eye care and eye treatment. (Elementary)

SEED DISPERSAL (EBF)

10 minutes—sound $1.80 3

The film presents many interesting ways by which seeds of plants are scattered in order to insure the propagation of the species. The methods illustrated include dispersal by the wind, transportation by animals, and forceful propulsion from the seed-case. The dramatic value of these examples is increased by the use of time-lapse photography. Attention is given to the germination of seeds under various conditions. The struggle for survival in the plant world is vividly portrayed. (Jr. High through College)

SEEDS OF DESTINY (FON)

18 minutes—sound $1.80 3

Gives the grim and tragic story of hunger and destitution which follows war. The first half of the film shows both physical and human devastation left by the war while the second half shows cooperation by national governments and by specialists of different nationalities in setting up and realizing the human objectives of UNRRA. The slight cost of rehabilitation program as compared to sums devoted to planned destruction is emphasized. Presentation is in terms of suffering children and final plea is for saving of a generation which, having known only war and devasta-

Value Unit

tion, must be shown the advantages of a peaceful world. (Sr. High through Adult)

SEEDS OF DESTRUCTION (Living Earth Series) (EBF)

10 minutes—sound—color $3.60 6

Reveals the alarming extent to which man is depleting the soil and forest resources upon which his very survival depends. Recalls the wealth of America's original resources and contrasts this with the tragic waste from devastating forest fires, floods, and overworked land. Recommends effective conservation measures, but reminds us that little time remains for putting them into practice. (Jr. High through Adult)

SELF-CONSCIOUS GUY (CORONET)

11 minutes—sound $1.80 3

Marty suddenly becomes keenly aware of his feelings of self-consciousness. As he tries to find ways to avoid these feelings, he discovers others have been extremely self-conscious yet have developed poise and self-assurance. He finds help for his own problem through developing skills, thinking of other persons, and getting his attention on the whole situation. (Jr. and Sr. High)

SENDING RADIO MESSAGES (EBF)

10 minutes—sound $1.80 3

Animated drawings clarify the basic principles of radio transmission. The operation of the following units is graphically explained: the microphone, the transformer and the modulator. Fundamental concepts are explained, as for example: sound waves, direct currents, alternating currents, voice current, carrier wave, and amplification. Photographic scenes are used to reveal the importance of radio and to illustrate operating units in a modern transmission station. (Jr. High through Adult)

SERIES AND PARALLEL CIRCUITS (EBF)

11 minutes—sound $1.80 3

Planned as a sequel to "Elements of Electrical Circuits." Takes up first, the relationship between resistance, current, and voltage in series circuits and then in parallel circuits. Type problems are presented by demonstration, with explanations in animation. The practical advantages and disadvantages of each circuit is illustrated and clarified with common examples. A simple series-parallel combination is described and explained. (Sr. High and College)

SERVANT OF THE PEOPLE (TFC) (See regulations—last page)

20 minutes—sound $3.60 6

The story of the making of the American Constitution. The Constitutional Convention is accurately depicted, with the various arguments and agreements during its course. Washington, Hamilton, Madison and Franklin are shown. The signing of the Constitution. An excellent account of the Continental Congress. (Elementary through Adult)

SEWING: ADVANCED SEAMS (YA)

10 minutes—sound $1.80 3

Demonstrates and explains the procedures for making the following advanced seams: french seam, flat fell seam, the tuck, and the welt seam. (Jr. and Sr. High)

Unit Value

SEWING: FITTING A PATTERN (YA)

10 minutes—sound $1.80 3
Shows how to adjust a standard dress pattern to the requirements of the individual figure. (Jr. and Sr. High)

SEWING: FUNDAMENTALS (YA)

10 minutes—sound $1.80 3
Demonstrates and explains the function and use of some of the basic tools used in sewing: thimbles, pins, needles, threads, tape measures, measuring gauge, tailor's chalk, scissors, shears, pressing cloths, and the sewing machine. (Jr. and Sr. High)

SEWING: HANDLING MATERIALS (YA)

10 minutes—sound $1.80 3
Discusses generally the characteristics and handling of cotton, woolen and synthetic fabrics as they relate to dressmaking. Specifically the film explains how the selection of a fabric is based on the pattern to be used, the purpose of the garment, and the ability of the seamstress. (Jr. and Sr. High)

SEWING: PATTERN INTERPRETATION (YA)

10 minutes—sound $1.80 3
Discusses the problems of interpreting the markings and instructions used in such dressmaking patterns as those offered by McCall, Simplicity, Butterick and Vogue. (Jr. and Sr. High)

SEWING: SIMPLE SEAMS (YA)

10 minutes—sound $1.80 3
Explains and demonstrates how to make six types of simple seams: plain seam, edges pinked; plain seam, edges overcoast; plain seam, edges stitched; plain seam, edges bound; plain seam, catch-stitched; and plain seam, top-stitched. (Jr. and Sr. High)

SEWING: SLIDE FASTENERS (YA)

10 minutes—sound $1.80 3
Shows the step-by-step process of fitting a slide fastener in a blouse, a skirt and a dress. (Jr. and Sr. High)

SHAKESPEARE, WILLIAM: Background for His Works (CORONET)

13 minutes—sound $2.40 4
In the England of today, the film shows the places of Shakespeare's times and elements of English life that gave Shakespeare his language and shaped his character. Kenilworth Castle, Stratford, the River Avon, Anne Hathaway's Cottage, The George Inn, The Tower of London are just a few of the memorial spots that link the past with the present. Then, in fine dramatic treatment, brief episodes are presented from some of the most studied plays: Act II, Scene 2 of *Romeo and Juliet*; Act I, Scene 5 of *Macbeth*; Act II, Scene 1 of *Taming of the Shrew*; Act IV, Scene 5 of *Merchant of Venice*; and Hamlet's famous soliloquy from Act III, Scene 1 of *Hamlet*. ((Jr. and Sr. High)

SHAKESPEARE, WILLIAM (EBF)

25 minutes—sound $3.00 5
Traces course of Shakespeare's life from his boyhood in Warwickshire through his career in the London theatre. Shows him

Unit Value

as actor and dramatist. Contains excerpts from "Romeo and Juliet," "Henry V," "As You Like It," "Julius Caesar," "Hamlet," and "Macbeth" as they would have been performed on the stage of Shakespeare's own theater.

SHARING ECONOMIC RISKS (CORONET)

11 minutes—sound $1.80 3

Bill, a high school boy, loses his bike through theft. The loss illustrates the economic risk which all people face, and ensuing action illustrates aspects of property and life insurance, and the principle of sharing economic risks. Effective film for use in social studies and business education. (Jr. and Sr. High)

SHARING WORK AT HOME (CORONET)

10 minutes—sound $1.80 3

This film shows the importance of cooperation to happy family life. It is a picture for home economics, language arts, social studies, and all other classes in which family relationships are studied. Your classes will not only enjoy the picture but they will learn how to take one of the big steps toward improved family living. (Jr. and Sr. High)

SHELL-FISHING (EBF)

11 minutes—sound $1.80 3

Views of oyster, crab, clam, and lobster fishing industries on eastern coast of United States. Planting, dredging and preparing crops for market. (Elementary through Sr. High)

SHEP, THE FARM DOG (EBF)

11 minutes—sound $1.80 3

Follows an attractive collie dog during his busy day about the farm. After herding the cows to pasture and routing the chickens from the garden, Shep is rewarded with a good breakfast. Later, Shep pursues a woodchuck to his hole and, after fruitless digging, rejoins Tommy, his young master, for hike and swim during which he retrieves sticks and assists Tommy in swimming to shore. (Elementary through Sr. High)

SHOOTING IN BASKETBALL (EBF)

10 minutes—sound $1.80 3

Wilbur Johns, Basketball Coach, U.C.L.A., gives the fundamentals of shooting, concentrating on the set-shot, stance, the action of the throw, aim, trajectory, and fingertip control are demonstrated, with special attention given to the fine coordination of all parts of the body required for accurate shooting, especially the inward rotation of hand and arm in making the throw. (Jr. High through Adult)

SHORT CUTS (Ind. U.)

27 minutes—sound $4.80 8

Explains and demonstrates logarithms, the slide rule, and other methods for simplifying computation. Explains the development and application of logarithms. Shows how a log table is constructed and used. Relates this to a model of a slide rule and demonstrates its operation and uses. (College and Adult)

Unit Value

SHORTEST WAY HOME (GREYHOUND)

33 minutes—sound—color $1.20 2

For restless Army veteran Wiley Pruitt, the shortest way home to Sauk Center, Minnesota, was by way of Boston, Florida, Texas, and California. Photographed in technicolor against some of the most beautiful scenery in America, this film takes Wiley to such fascinating places as Greenfield Village, Kentucky horse farms, the Pennsylvania Turnpike, New England, Colonial Williamsburg, Miami, New Orleans, a Texas cattle ranch, Hollywood, and Yellowstone National Park. As he visits members of his old bomber crew, Wiley discovers all the history and drama to be found along America's great highways. (Primary through Adult)

SHRIMP PLEASE (USF&W)

20 minutes—sound—color $1.20 2

Shows the methods used by the Louisiana and Mississippi shrimp industry to make shrimp available for tables all over the United States. Includes blessing of the fleet; catching and exploratory fishing for shrimp; shrimp processing, including freezing, breading, drying, and canning. Contains information on how to purchase, prepare and serve shrimp. (Elementary through Adult)

SHRIMP TIPS FROM NEW ORLEANS (Fish & Wildlife)

14 minutes—sound—color $1.20 2

Shrimp Tips contains recipes that are both old and new, well-loved and time-tested ways of preparing shrimp that are rooted in the methods of cuisine artists of another era, and new ideas that stand up well against the rigid rules of what is good—a la Creole—today.

SHY GUY (CORONET)

12 minutes—sound $1.80 3

Helps adjust the shy adolescent as he witnesses the screen "shy guy's" start to improved social relation through those principles of friendly association demonstrated by his better adjusted fellow students. (Jr. High through Adult)

SIGN OF DEPENDABLE CREDIT (USDA)

20 minutes—sound $1.20 2

Designed to show how the Production Credit Ass'n. was organized and the manner in which it operates. We are shown how the farmer of today must utilize the new improvements and inventions in order to compete in this highly specialized world. In order to do this many farmers must rely on loans which they obtain from the Production Credit Ass'n. (College and Adult)

SIGNING OF THE DECLARATION OF INDEPENDENCE, THE (YA)

27 minutes—sound $3.00 5

July 4, 1776, the signing of the Declaration of Independence at Philadelphia. The personalities and the event which form a part of the heritage of every American. (Junior High through Adult)

SILENT WAR (OIAA)

10 minutes—sound $1.20 2

The war against Yellow Fever now being waged by scientists in the jungles of Columbia. Shows how vaccine is made, dried, frozen, and transported by mule-back to a town in the jungles

Unit Value

of Columbia and how Yellow Fever is slowly being conquered in equatorial South America. Describes how this research is making United Nations jungle fighters immune to the dreaded disease. (Jr. High through Adult)

SILKS AND SULKIES (NFB)

11 minutes—sound—color $1.20 2

The thrill of harness racing on Prince Edward Island, with a glimpse behind the scenes at the training of a colt for this sport. We follow Bellhop's career as a racer, from his unwilling introduction to harness through trials with a bicycle sulky to his first big race. Climax of the film comes with scenes of this mixed race of trotters and pacers at Charlottetown's Old Home Week. (Elementary through Adult)

SIMPLE MACHINES (EBF)

11 minutes—sound $1.80 3

Shows basic features of the lever, the inclined plane, the wedge, the pulley, and the screw. Applications of these devices to modern complex machines are demonstrated. The evolution of the machine and its part in contemporary civilization is indicated. (Jr. High through Adult)

SIMPLE STUNTS (CORONET)

10 minutes—sound $1.80 3

Providing instruction in healthful and interesting group activities that require little equipment, this film gives a detailed explanation and illustration of simple stunts for strength, stunts for skill and stunts with sticks. Safety precautions are emphasized throughout the film as the techniques and benefits of entertaining variations on simple stunts are demonstrated. The film imparts finesse and confidence for easy performance. (Jr. and Sr. High)

SKELETON, THE (EBF)

12 minutes—sound $1.80 3

Describes in detail the formation, growth, development, and function of the human skeleton. Microphotography and animated drawings reveal what bones consist of and how they grow. Dramatic motion picture X-ray photography shows how joints move. Attention is called to the role of proper food and good posture in the correct development of bone. (Sr. High through Adult)

SKI HOLIDAY (NFB)

11 minutes—sound—cloor $1.20 2

Snowtime is ski-time in the National Parks in the Canadian Rockies. Scenes of skiers taking time out for lunch 8,200 feet above sea level, or of snow pluming from their heels on a downhill run, are only a small part of a film with the beauty and spirit of skiing in the great mountains. (Jr. High through Adult)

SLEEP FOR HEALTH (EBF)

10 minutes—sound $1.80 3

Presents the importance of regular sleeping habits from the viewpoint of a child. Shows the child how a regular bedtime which allows for sufficient sleep helps him attain goals which he himself desires. Emphasizes the child's own responsibility in the formation of good habits. Considers dreaming as a normal part

Unit Value

of sleeping. Graphically illustrates how lack of sleep causes irritability and interferes with the enjoyment of everyday living. (Primary and Elementary)

SLEEPING BEAUTY, THE (CORONET)

15 minutes—color $4.80 8

All the magical beauty and age-old charm of this fairy-tale classic have been caught in this version of the lovely princess whose century-long sleep was ended by a kiss. Richly costumed actors recreate the feeling of medieval pageantry that makes this a memorable film for reading background as well as pure enjoyment. (Kindergarten, Primary, Intermediate)

SLOVAKIA—Farms and Towns of Slovakia (UWF)

20 minutes—sound $3.00 5

Here we study people who, living within a mountainous land relatively remote from the highways of communications, have maintained conservative traditions. These Slavic families are seen living in a wooded mountainous land. Isolated from the main currents of Central European life, their standard of farming and industrial practices are relatively poor. However, we see that where highways are being developed, and isolation is breaking down, changes are taking place in the traditional ways of life of these Slavic peasants. (Jr. High through Adult)

SMOKE JUMPERS (USDA)

10 minutes—sound—color $1.20 2

This film shows how the U.S. Forest Service has developed its own airborne fire-fighters to combat forest fires in remote sections of the country. (Jr. High through Adult)

SNAKES (CORONET)

10 minutes—sound—color $3.60 6

Overcoming the idea that all snakes are dangerous, this film distinguishes the four poisonous snakes found in this country from those that are harmless. It is a specific warning against the poisonous varieties while encouraging the study and observation of harmless snakes. It develops the life habits and adaptations of representative examples showing their equipment for locomotion, sensation, nutrition and self-protection. (Jr. and Sr. High)

SNAP OUT OF IT (CORONET)

15 minutes—sound $2.40 4

A high school boy has worked hard for an "A" but gets only a "B" in history. His emotional upset at the disappointment brings him to the attention of the school principal. Under the principal's guidance the boy finds how to set his expectations realistically to avoid disappointments. He learns to use the emotional drives of unavoidable disappointment for a positive attack on problems. (Jr. and Sr. High)

SNAPPING TURTLE (EBF)

11 minutes—sound $1.80 3

The life story of an interesting reptile in its natural habitat. Unusual photographic studies permit observation of the snapping turtle's detailed features, habits, and its encounters with other

Unit Value

animal life. The laying of the eggs and the hatching are two outstanding episodes. A painted turtle is introduced for purposes of comparison. The winter hibernation concludes the presentation. (Elementary through Sr. High)

SOCCER FOR GIRLS (CORONET)

10 minutes—sound $1.80 3

Today soccer is gaining in popularity as a women's recreational activity. In this action-packed film, skilled players demonstrate the various traps, dribbles and passes of the game. Their application to playing situation is shown; close-ups and slow-motion bring out the details of technique while an exciting action sequence at the close reviews the points of play presented. (Jr. and Sr. High)

SOCIAL COURTESY (CORONET)

10 minutes—sound $1.80 3

Why do some people seem to enjoy social gatherings, while others would rather stay at home? Often it's because these people simply don't know how to get along with others. Here is a motion picture which shows that getting along in social groups merely requires a natural, easy form of behavior that makes use of courtesy. Students will see how to improve social manners, how to appreciate the difference between formal and informal events and how to learn the "right thing to do." (Jr. and Sr. High)

SOCIAL DANCING (CORONET)

10 minutes—sound $1.80 3

Here are the two basic fox trot and waltz steps, with three simple variations to send even the beginner off to a dancing start. Both the boy's and girl's parts are shown in close view, and each step and variation is clearly explained with diagrammatic effects. Here is the key to dancing with ease and assurance. (Jr. and Sr. High)

SOFTBALL FOR BOYS (CORONET)

10 minutes—sound $1.80 3

Slow-motion photography is used to analyze the individual player skills, and the necessary principles of team play are dramatized in actual game situations. The film also discusses and puts emphasis on pitching techniques. (JJr. and Sr. High)

SOFTBALL FOR GIRLS (CORONET)

10 minutes—sound $1.80 3

This film studies the fundamental softball skills of throwing, catching, batting and fielding as they are demonstrated during the exciting last inning of a girls' intramural game. Each player's individual skill and coordinated team play is pointed out to show students how the fun of this good sport is heightened by intelligent practice. (Jr. Sr. High)

SOFTBALL FUNDAMENTALS (YA)

10 minutes—sound $1.80 3

A demonstration film designed to teach the individual techinques of play involved in softball, using junior high school girls as the players. The film illustrates the techniques of batting, throwing, pitching, running bases, and fielding. (Elementary and Jr. High)

Unit Value

SOLAR FAMILY, THE (EBF)

10 minutes—sound $1.80 3

The evolution of the solar system is revealed according to the planetesimal hypothesis. This is followed by a portrayal of the real and apparent motion of the planets. Among the special phenomena presented are: the phases of Venus; retrograde motion of Mars, Jupiter and its satellites; the apparent motion of Saturn's rings; orbits of the planetoids, Eros and Anteros; orbit of Halley's comet; and the motion of the solar system in space. (Jr. High through College)

SOLAR SYSTEM (CORONET)

10 minutes—sound $1.80 3

Names of the planets, their relative sizes, distances from the sun and the forces at work in the solar system are presented with imagination. An actual scale model of the solar system is set up to visualize dramatically the immensity of distances between the respective planets and the sun. The relationship of the planets to each other; their orbits, differences between planets and stars; and important highlights about gravitational attraction, light and heat are other important teaching points covered. (Jr. High)

SOLIDS, LIQUIDS & GASES (YA)

10 minutes—sound $1.80 3

This film is an introduction to the three states of matter. It defines a liquid, a solid, and a gas, and demonstrates how a substance can be changed from one state to another, depending on how hot or cold it is. Explains everyday applications of these concepts. (Jr. High)

SOME FRIENDLY BIRDS (EBF)

15 minutes—silent $1.20 2

Birds that have similar tastes and habits: martins, chickadees, and nuthatches, the house wren, bluebirds, woodpeckers—building nests, feeding their young and the "Spring dance" of the flickers. (Elementary through College)

SOMETHING YOU DIDN'T EAT (USDA)

10 minutes—sound—color $1.20 2

A Walt Disney cartoon showing through use of animation the need for a balanced daily diet of foods from each of the seven basic groups. (Elementary through Adult)

SOUND RECORDING AND REPRODUCTION (EBF)

10 minutes—sound $1.80 3

Describes how sound is converted into light rays to produce sound motion pictures, and how the projector is able to change the light rays back into sound waves. We learn from the film how the two great systems operate, sound recording by variable area and sound recording by variable density. (Sr. High through Adult)

SOUND WAVES AND THEIR SOURCES (EBF)

10 minutes—sound $1.80 3

Demonstrates and explains the three types of sound sources, including the vocal organs. The transmission of sound waves through the air is visualized. Such characteristics of sound waves,

Unit Value

as frequency, amplitude, wave length, fundamentals, and harmonics, are explained with acoustic accomplishment. The high-speed camera and an oscilloscope help to clarify the phenomena portrayed. (Jr. High through Adult)

SOUNDS OF MUSIC (CORONET)

10 minutes—sound $1.80 3

This film presents the characteristics of musical sound. Our youngsters meet the genial proprietor of their local music store who demonstrates the principles of amplitude, quality and frequency with the sounds and grooves of a phonograph record, Then, on a tour of his shop, we see and hear string, wind and percussion instruments and derive a greater appreciation of their melodies. (Jr. and Sr. High)

SOUTH AFRICA (MOT)

11 minutes—sound $1.80 3

Long known throughout the world for its fabulous wealth in gold and diamonds, its Zulus proud of their tribal glory, and its Boers and Britona, its rugged and challenging topography (all of which the film depicts), South Africa only recently emerged as a potential industrial power among nations. South Africa has a key position at the junction of the Atlantic and Indian oceans; it is ready to meet its post-war problems. (Jr. High through Adult)

SOUTH AFRICA—Riches of the Veldt (UWF)

20 minutes—sound $3.00 5

When you meet a typical family in the city of Johannesburg and see their way of life and surroundings, you can imagine yourself in an American city. When you participate in the vacation jaunt of two children in this family beginning with a day in the city and moving on the mining and industrial areas, you are in contact with South Africans; you hear their comments in English and Africans; you see how they work and live and you absorb a wealth of human geography. GEOGRAPHIC CONCEPT. A fertile land, with Mediterranean climate plus great mineral wealth, nurtures a vigorous economy. (Elementary through Adult)

SOUTH CHILE (OIAA)

18 minutes—sound $1.20 2

Pictures the region at the very southermost part of South America. Here much rain falls, and high winds blow most of the time. Grand glacial scenery and the story of sheep-raising on a large scale feature this description of distant Patagonia. (Jr. High through Adult)

SOUTHEAST USA—The Changing Cotton Land (UWF)

20 minutes—sound $3.00 5

This film lesson shows that the Southern United States is an area with many natural resources. We learn that the possibilities for agricultural and industrial production are tremendous. However, much land has been destroyed through wasteful farming practices. Through the the untiring efforts of the County Agents the education of the younger generation of farmers, and adherence to the tenets of the Conservation Policy, the people of the Southeast are shown rebuilding the land. The introduction and growth

Unit Value

of new industries is also seen to be producing a new era of development for this area. (Elementary through Adult)

SOUTHEASTERN STATES (EBF)

10 minutes—sound $1.80 3

Delineates the variety of living patterns in Arkansas, Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, Virginia, Kentucky, and Tennesssee, with a brief historical introduction. Stately plantation homes, mountaineer cabins, modern homes in southern cities, rolling blue grass country, orchards, cotton and tobacco fields, farm and factories—all woven together to tell the story of the region's twenty-eight million people and how their welfare is bound up with the national economy. (Elementary through Adult)

SOUTHERN BRAZIL (OIAA)

20 minutes—sound $1.20 2

Shows Brazil's march of progress as exemplified in its southernmost area, the states of Parana, Santa Cantarina, and Rio Grande di Sul. Pictures Brazil's great cattle country and its granary. (Elementary through Adult)

SOUTHWEST USA—Water for Dry Land (UWF)

20 minutes—sound $3.00 5

This film presents a picturization of the dependence of man upon his supply of water. The living in oasis is contrasted sharply with the barren wastes of surrounding deserts. The transformation of desert lands by man's triumph in controlling the water supply and the tremendous developments possible through abundant hydroelectric resources, is vividly portrayed. (Elementary through Adult)

SOUTHWESTERN STATES (EBF)

10 minutes—sound $1.80 3

Portrays aspects of life in areas of Texas, Oklahoma, New Mexico, and Arizona. Reference is made to the topography, rainfall, and other characteristic featurs including the imprint of Spanish and Indian cultures. Irrigation, stock raising, mining, agricultural, oil extracting and refining are among the occupational activities shown. The exchange of goods and services with those of other sections of the country is depicted with animated photography. (Elementary through Adult)

SPAIN: THE LAND AND THE PEOPLE (CORONET)

10 minutes—sound $1.80 3

Because of its past prominence in world affairs, because of its literature and music, because of its profound cultural influence in the United States, every student should be familiar with Spain. This film takes them from Madrid in the north to the fertile river valleys in the south. They visit the cities and villages and meet Pedro Ybarra and his family in a stimulating education experience. (Jr. and Sr. High)

SPANISH CHILDREN (EBF)

10 minutes—sound $1.80 3

Provides a delightful visit with a rural family of southern Spain.

Unit Value

Depicts a trip by a boy and his father to a city market place; portrays many representative aspects of Spanish life; and lays particular emphasis on the activities of the children of the family. Concludes with scenes of an enjoyable evening at home celebrating the little daughter's birthday. (Primary and Elementary)

SPANISH CONQUEST OF THE NEW WORLD, THE (CORONET)

10 minutes—color—sound $3.60 6

The names of Cortez, Pizarro, Balboa, DeSoto and other men who won for Spain one of the greatest empires in the world, take on a new meaning as we see the new lands conquered, cities built, Indian civilizations overthrown and replaced with the culture of of Spain. (Intermediate, *Junior High, Senior High,* College)

SPANISH INFLUENCES IN THE UNITED STATES (CORONET)

10 minutes—sound $1.80 3

Historic locales from Florida to California document this record of our Spanish cultural heritage. Dolores and Don find they live in a Spanish-type house and use many common words of Spanish derivation. When their study turns to other sections of the country, they discover the missions, longhorn cattle, horses and other things originally brought here by the Spanish. Everywhere we find that the Spaniards exerted a profound influence in molding the pattern of our own culture. (Jr. and Sr. High)

SPARKY, THE COLT (CORONET)

10 minutes—sound $1.80 3

Against familiar background of farm settings, this story provides specific interest value in reading, youthful discussion and writing activities. From the moment your children "discover" Sparky, the wobbly little colt, they'll eagerly follow his adventures as he grows strong, learns to canter across the fields and becomes a strong, beautiful horse. (Primary)

SPEECH: FUNCTION OF GESTURES (YA)

10 minutes—sound $1.80 3

Explains the function of the gesture in public speaking, and points out how your talk can be made more effective by the use of the correct gestures at the correct moment. (Jr. and Sr. High)

SPEECH: PLANNING YOUR TALK (YA)

10 minutes—sound $1.80 3

Explains how to plan and organize your talk beforehand so as to achieve the greatest effectiveness in its presentation. (Jr. and Sr. High)

SPEECH: PLATFORM POSTURE & MOVEMENT (YA)

10 minutes—sound $1.80 3

Deals with the importance of good appearance and proper posture for the public speaker. Each element is treated in detail from the viewpoint of the inexperienced speaker, as the film points out that the audience is impressed by what it sees as well as by what it hears. (Jr. and Sr. High)

Unit Value

SPEECH: STAGE FRIGHT & WHAT TO DO ABOUT IT (YA)

10 minutes—sound $1.80 3
Analyzes the cause of stage fright, and shows the inexperienced public speaker what he can do to overcome it both in the preparation for his talk and during the delivery of his talk. (Jr. and Sr. High)

SPEECH: USING YOUR VOICE (YA)

10 minutes—sound $1.80 3
Explains and demonstrates the importance of good speech habits in everyday situations. Explains that a speaker must be heard, must be understood, and must be pleasant, in order to be effective. Shows that most poor speech is due to the speaker's carelessness. (Jr. and Sr. High)

SPEEDBALL FOR GIRLS (CORONET)

10 minutes—sound $1.80 3
Rapidly growing in popularity, speedball provides excitement and variety. The film carefully explains players' positions on the field, rules of the game, and techniques in developing team cooperation and individual skills, including kicking, volleying, juggling, passing, and receiving. This film makes it easy for students to master the challenging game of speedball. (Jr. and Sr. High)

SPEEDING YOUR READING (TAE)

10 minutes—sound $1.80 3
Designed to improve reading speed of high school and adult classroom audiences by giving the student an understanding of correct reading habits, the film concentrates on developing correct eye movements. We see the most common reasons for slow reading and suggestions are made for correction of reading fault. (Jr. High through Adult)

SPELLING IS EASY (CORONET)

11 minutes—sound $1.80 3
A practical visual aid to spelling. It is a motivational film for the intermediate grades, and presents the five basic rules for learning to spell. (Elementary through College)

SPIDERS (EBF)

10 minutes—sound $1.80 3
The nursery-web, the orb-web, the funnel-deb, and the trap-door spiders appear in this picture. The complete life cycle of the first is presented, while the peculiar habits and characteristics of the others are shown. The construction of an orb-web is shown through every step of the procedure. The retreat of the trap-door spider is explained and illustrated pictorially. Also scenes of the spiders as hunters and providers. (Jr. High through College)

SPOTTY: THE STORY OF A FAWN (CORONET)

10 minutes—sound—color $3.60 6
Filmed against the authentic background of the north woods the adventures of Spotty, a wild fawn, are believable and fascinating. Participation devices are aurally and visually built into the picture and the narration has been keyed to primary grade word lists. (Primary)

Unit Value

SPRING ON THE FARM (EBF)

11 minutes—sound—color $3.60 6
Portrays the adaptation of plants and animals to the changing seasons. This film follows Joan and Jerry as they observe the spring scene on the farm. They see buds swelling, birds returning, grass becoming green, fruit trees blooming, the planting of gardens, moths coming out of their cocoons, and young rabbits emerging from thier nests. (Primary through Jr. High)

SPRINGTIME FOR JEAN MARIE (Ind. U.)

14 minutes—sound $3.00 5
Presents the book Springtime for Jean Marie by Francoise, published by Charles Scribner and Sons. The viewer looks through the giant's pipe to see the Eiffle Tower. A small French song is sung. (Primary)

STEAM ENGINE (YA)

10 minutes—sound $1.80 3
An animated film tracing the historical development of the steam engine (both stationary and locomotive). Simple animated diagrams explain the basic principles by which the steam locomotive operates. (Elementary and Jr. High)

STEPS OF THE BALLET (EBF)

20 minutes—sound $2.40 4
A fascinating portrayal of a modern ballet narrated by Robert Helpmann, a choreographer and dancer. Reveals basic ballet positions and movements and explains their significance. Illustrates the work of the choreographer, solo dancers, composer, and designer of stage settings in the creation of a ballet. Takes us backstage where we see a ballet in rehearsal and learn its story, and finally shows us a finished performance of the ballet. (Jr. High through Adult)

STILWELL ROAD (OWI)

50 minutes—sound $1.20 2
Here described is the desperate and costly defense of the thin arterial line which pumped a lifeblood of oil, food and fighting steel into China. Names such as Stilwell, Merrill, Chennault, Wingate and Cochran become alive with interest as we see these men in action. This is the campaign that took three years to win, claimed thousands of lives and cost billions of dollars. (Jr. High through Adult)

STORY OF AGRICULTURE (DEPT. OF AGRICULTURE)

14 minutes—sound—color $1.20 2
This film shows how farmers have been helped by the Dept. of Agriculture through research, marketing and conservation, stabilization and other fields to raise their standards of living. (Sr. High through Adult)

STORY OF A STORM (CORONET)

10 minutes—sound $1.80 3
In this dramatic story of a single storm audiences will learn what conditions cause a rain storm to develop. Names of the different kinds of clouds and a general knowledge of pressure areas, fronts,

Unit Value

meteorological instruments and similar related information are woven into the fabric of this day-by-day account. Because a storm affects the lives of people as it moves across the country, this motion picture will foster important social studies concepts as well as give general science information. (Jr. and Sr. High)

STORY OF A TRANSPORT (OWI)

20 minutes—sound $1.20 2

A timely and unique treatment of an important and thrilling war operation. This picture records the colorful career of the 24,000-ton transport, *Wakefield*. It dramatically links the ship's romantic past as the peacetime luxury liner, *Manhattan*, with her grim, war-service present. (Jr. High through Adult)

STORY OF A VIOLIN (CanFB)

21 minutes—sound—color $4.80 8

When a 12-year-old boy breaks his violin, a skilled violin-maker of Canada is seen making a new one. All steps are shown beginning with the selection and curing of the wood, then designing, construction, finishing. An animated sequence, showing the component parts of the violin, is accompanied by Bach's "Gavotte in E" from the "Violin Sonata No. 6." (Elementary through Sr. High)

STORY OF CHRISTOPHER COLUMBUS (EBF)

17 minutes—sound $2.40 4

Brings to life the story of America's discovery and of the man whose conviction, courage, and faith brought it about. Clearly dramatizes highlights in the life of Columbus, including his boyhood dreams of travel and adventure, his tireless search for aid in organizing an expedition, his long and hazardous voyage westward, and finally his landing at San Salvador in 1492. (Elementary through Sr. High)

STORY OF COAL (KB)

10 minutes—sound $1.80 3

Shows how the earth was in a molten state millions of years ago and how it then began to solidify causing the forming of mountains. Jungles of giant trees grew. Animated diagrams show the work of the sun on growing things. Then we have lightning, rain and a hurricane. Decay that takes place in swamp land and the surf pounding against the shore. All of these are shown to have helped in forming peat beds and later coal. (Elementary through Adult)

STORY OF COPPER (BM)

29 minutes—sound—color $1.20 2

Copper has played an important part in man's progress since prehistoric times. This is the story of modern mining, concentrating, smelting and refining methods. The film concludes with some of the many uses of copper in our life today. (Jr. High through Adult)

STORY OF DR. JENNER, THE (TFC) **(See regulations—last page)**

10 minutes—sound $1.80 3

An interesting film which tells the story of the discovery of vaccination against smallpox. The story is told in such a manner that it is not soon forgotten. (Elementary through Adult)

Unit Value

STORY OF ELECTRICITY (KB)

11 minutes—sound $1.80 3
Deals with the early discovery of the lodestone and the properties of magnetism. Depicts a few of the many episodic events which lead up to the use of magnetism in the producing of electricity. Shows how the discoveries of Morse, Edison, and others have contributed to our modern world. (Jr. and Sr. High)

STORY OF GASOLINE (BM)

20 minutes—sound—color $1.20 2
The Story of Gasoline combines animation and "live" sequences to tell what gasoline is, how it is made, and how it performs. The film traces the story of gasoline from crude oil to finished product and explains in simple terms the complex structural patterns of petroleum molecules making up the fuel that propels millions of automobiles, airplanes and other internal combustion engines. (Jr. High through Adult)

STORY OF LUBRICATING OIL (BM)

22 minutes—sound—color $1.20 2
Shows, by animation, how lubricating oil is produced and tailored to meet the different needs of modern mechanisms, from watches to automobiles and farm tractors. (Primary through Adult)

STORY OF MENHADEN (USFish&Wildlife)

21 minutes—sound—color $1.20 2
Reviews the uses of fish in industry as an ingredient of animal and poultry feed, paint, linoleum, cosmetics, etc. Then shows how the fish are caught with especially-designed boats and large nets. Also the processing steps. (Jr. High through Adult)

STORY OF MONEY (BIS)

16 minutes—sound $1.80 3
Explains the development of the monetary system from the earliest days of simple barter to the complexities of modern banking, and shows the evolution of coins, checks and banking houses and the part they play in the world of today. (Elementary through Adult)

STORY OF NICKEL REFINING (BM)

16 minutes—sound $1.20 2
Processing of nickel into electrolytic nickel, black nickel oxide and nickel shot is shown. (Sr. High through Adult)

STORY OF OIL (YA)

17 minutes—sound $1.80 3
This Canadian film shows how a new oil field is located by means of the seismograph, how the oil well is drilled, how the oil is stored as it comes from the well, its transportation to the refinery, and what takes place in the refinery. (Elementary through Sr. High)

STORY OF OUR FLAG (McCRARY)

10 minutes—sound $1.80 3
Shows the development of the United States and how its territorial expansions are tied in with the changes in the flag until it reached its present status. (Elementary through Sr. High)

Unit Value

STORY OF STEEL (KB)

11 minutes—sound $1.80 3
Describes the manufacture of steel and shows its important uses in the world today. (Jr. and Sr. High)

STORY OF WHEAT (KB)

10 minutes—sound $1.80 3
Deals with the history, growth, harvesting and preparation of wheat for its most important use as bread. (Jr. and Sr. High)

STORY THAT COULDN'T BE PRINTED (TFC) **(See regulations—last page)**

11 minutes—sound $1.80 3
The history of John Peter Zenger, pre-Revolutionary War printer and publisher, who was persecuted, arrested and tried for publishing reports reflecting upon the honesty of His Majesty's Colonial representative. Zenger's acquittal was one of the first victories for freedom of the press and contributed to the inclusion of this doctrine in the Bill of Rights. (Jr. and Sr. High)

STORY WITH TWO ENDINGS (OWI)

10 minutes—sound $1.20 2
The theme of this impelling film is inflation. The scene is the U.S.A. Time is November, 1918 when men were returning from war. We are shown that there are four ways in which we can avoid the situation after the first World War and write a story with a different ending—not one that spells economic depression but one that spells prosperity with good business and agricultural prosperity for the Nation. (Jr. High through Adult)

STRADDLE AND SURFACE MILLING TO CLOSE TOLERANCE (C)

20 minutes—sound $1.20 2
Methods and procedures for rough milling a solid bar of stock all over and finish milling the same piece to a given shape and size. Procedures used when setting up a gang of cutters on an arbor for milling to close tolerances. (Sr. High through Adult)

STRADDLE MILLING (C)

12 minutes—sound $1.20 2
Procedures followed when straddle milling a pair of connecting rods held in a fixture. The function of fixtures in production work. A setting gauge is used to check the cutter set-up. The use of coolant on the cutters, the checking of each cut, the advantages of the fixture and the necessity for keeping the table and the work free of chips and burrs. (Sr. High through Adult)

STRENGTH OF THE HILLS (USDA)

10 minutes—sound $1.20 2
Explains the dangers and losses by forest fires and the methods to increase woodland yield. (Elementary through Adult)

STRING CHOIR, THE (EBF)

11 minutes—sound $1.80 3
Opens with the string ensemble playing a selection from "L'Arlesienne" by Bizdt. After the characteristics of the violin are

Unit Value

explained a violinist renders a solo. The camera brings into focus the other instruments, and techniques involved in playing them. (Elementary through Adult)

STRING INSTRUMENTS

10 minutes—sound $1.80 3

At a concert for children, Conductor Eugene Kash illustrates points on musical form and introduces the string instruments. When the violin, viola, and cello have been presented separately, they join in a fugue, and later Mr. Kash plays a gavotte on his violin. A graceful little troop performs a dance based on the legend of Persephone and set to music from which other children have written the themes. (Primary and Elementary) (Music)

SUBJECT, VERB, AND OBJECT (MITCHELL)

13 minutes—silent—color $3.00 5

A color film which emphasizes "big primary grammatical relations" in the sentence and "thought blocks" recommended in a National Council of Teachers of English Monograph. Color symbols are used to emphasize meaning. Grade placement based on reading and vocabulary difficulty is Grade 4, which allows a margin of comprehension for difficult concepts, since the film is planned for use in Grade 6 or higher for review and remedial purposes. It is the only film of its type in the field of English grammar and hence fills a definite need. (Elementary through Sr. High)

SUBTRACTION IS EASY (CORONET)

10 minutes—sound $1.80 3

In this companion film to "Addition," Billy faces the problem of deciding whether he will have enough money to buy a baseball after purchasing paints and a bat. Students see mathematics in action —and from this basic film learn borrowing and other fundamentals of subtraction. Both films also teach the relative values of coins in our monetary system. (Primary)

SUGAR CANE (C)

21 minutes—sound $1.20 2

History of sugar cane in the continental United States (Louisiana) is first rapidly sketched. Death of the prosperous industry as a result of disease and insect attacks until in 1926 the growing of sugar cane in Louisiana was almost at an end. Attack of the problem by development of new breeds is then considered and the methods of developing these is carefully shown. Then comes a general outline of cane growing practices, harvesting methods, and refining of sugar. (Jr. High through Adult)

SULPHUR (BM)

20 minutes—sound—color $1.20 2

Produced in cooperation with the Texas Gulf Sulphur Company, this film tells the story of sulphur from location of deposits to shipment by rail and ships. Animated drawings are used to show some of the processes. (Jr. High through Adult)

SULPHUR AND ITS COMPOUNDS (CORONET)

10 minutes—sound—color $3.60 6

Sketches the highlights of the history of sulphur. Presents the mining of sulphur by the Fresch method. Studies the physical

Unit Value

and chemical properties of sulphur and its compounds, particularly sulphur dioxide and sulphuric acid. (Sr. High)

SUMMER ON THE FARM (EBF)

10 minutes—sound—color $3.60 6

This charming color film is one of a series describing the cycle of seasons. Observing the growth of plants and animals during summer becomes a fascinating experience as we follow Joan and Jerry in their ramblings by the pond, through the orchard, and into gardens and fields. The children finally return to the house where Mother has cut the first ripe watermelon of the season. (Primary and Elementary)

SUNFISH (EBF)

10 minutes—sound $1.80 3

Presents the life of the sunfish from the preparation of the nest, the laying and fertilizing of the eggs, the hatching of the eggs, and the development of the fish to maturity. (Elementary through Adult)

SUN'S FAMILY (YA)

10 minutes—sound $1.80 3

Explains what the solar system is: that the sun is really one of the smaller stars, and that nine planets revolving around it constitute its "family;" that the earth is one of these planets, and that each planet travels in a fixed orbit around the sun. (Elementary)

SUPREME COURT (CORONET)

10 minutes—sound $1.80 3

This story about the Supreme Court of the United States begins in a city a thousand miles from Washington. As we follow a case from inception, through the lower courts to final hearing before the Supreme Court, we learn the relationship of the court to the "plain citizen." We see the Supreme Court as the guardian of Constitutional rights, learn its function, powers and jurisdiction . . . a candid film lesson of the highest court in our Federal Judicial System. (Jr. and Sr. High)

SURPRISE FOR JEAN (EBF)

7 minutes—sound—color $1.80 3

It is Jean's sixth birthday, and Mother has planned a big surprise. Jean and Frank are sent on an errand. While they are gone, Jean's little friends come to her house with birthday presents. Quickly they hide themselves, and when Jean and Frank return, the guests rush out and shout "Happy Birthday!" The presents are opened, and the children enjoy refreshments around a festive table. (Primary)

SURRENDER OF CORNWALLIS AT YORKTOWN, THE (YA)

27½ minutes—sound $3.00 5

At British headquarters at Yorktown, October 17, 1781, Lord Cornwallis describes the desperateness of his situation and drafts a letter of surrender to General Washington. An American attack on a British position ceases when Cornwallis orders a parley with the Americans. General Washington receives the surrender letter and negotiations begin. Walter Cronkite explains the significance of this victory. (Jr. High through Adult)

Unit Value

SURVIVAL OF THE FITTEST (TAD)

20 minutes—sound $1.20 2

Shows how the fine background of physical conditioning of our Air Forces enables two American fighter pilots who are forced to parachute from a disabled plane to travel through battle-infested areas and reach safety. (Sr. High through Adult)

SWEDEN—Ports of Industrial Scandinavia (UWF)

20 minutes—sound $3.00 5

The people of one of the earth's most northern communities live well because abundant water power helps them to make good use of their forests, minerals and farmlands. Following an ice-breaker merchant vessel along Sweden's east coast we observe the products at several port cities. We see industries that are based on Sweden's most important natural resources, hydro-electric power, iron and lumber. Life in old and new Stockholm is contrasted. We see examples of the craftsmanship of Sweden's potters and glassmakers and, finally accompany the first mate of the merchant vessel to his home in one of Sweden's cooperative apartments and observe the family in their daily life. (Elementary through Adult)

SWEDEN (MOT)

10 minutes—sound $1.80 3

Here is depicted Sweden's paradoxical and unique balance of monarchy, capitalism—the Middle Way—which puts Sweden well on the way toward complete return to the abundant life and to expansion of its peacetime industries. (Jr. High through Adult)

SWIM AND LIVE (OWI)

20 minutes—sound $1.20 2

Swimming is no longer a recreational pastime to American soldiers sailing the seas bound for battlefronts all over the world, but is a grim matter of life and death. This film superbly photographed by the Army Air Force at Miami Beach shows how the Army is training its men to swim so that they may live. (Jr. High through Adult)

SWITZERLAND—Mountain Farmers (UWF)

20 minutes—sound $3.00 5

This film deals with the community and family life of a typical Swiss farm family in a small Alpine community. The well organized farm cooperatives, and progressive methods of agriculture reveal the peace-loving congenial atmosphere which exists among the people of Switzerland. The children in the film play an important part in this story, as they dramatize the customs and traditions of the nation in a very interesting manner. (Elementary through Adult)

SYMPHONY ORCHESTRA (EBF)

10 minutes—sound $1.80 3

Two Wagnerian compositions are featured in this film in the "Ride of the Valkyries," and the prelude to Act 3 of "Lohengrin." The work of the conductor, Howard Barlow, is caught by unique camera angles as he interprets these brilliant scores and through his orchestra of Philharmonic players, brings this interpretation into sound. (Elementary through Adult)

Unit Value

SYNTHETIC FIBERS—NYLON AND RAYON (EBF)

15 minutes—sound $2.40 4

Reveals how modern science and technology have made possible the development of new artificial fibers for making textiles—specifically rayon and nylon. Portrays simply but graphically some of the processes used in making these fibers, some of the ways in which they are useful to man, and some of the characteristics of the textiles made from them. (Elementary through Jr. High)

SYNTHETIC RUBBER (BM)

21 minutes—sound $1.20 2

In which is traced the history of the development of the first rubber-like material in 1892 to present-day production methods in synthetic rubber plants. Processes involved in the transition of chemicals to rubber are described step-by-step. (Jr. High through Adult)

TACKLING IN FOOTBALL (EBF)

10 minutes—sound $1.20 2

Andrew Kerr, Football Coach, Colgate University, teaches the fundamentals of good tackling: physical condition, speed, body placement, drive, sure grip, timing and body conrol. Describes the two basic kinds, shoulder and cross body tackles. Special instructions are given for practicing with attention to safety measures and ways of reducing the shock of tackling. (Jr. High through Adult)

TALE IN A TEA CUP (TEA BUR)

22 minutes—sound $1.20 2

Filmed in England and India. Traces the important role of tea in world history and then shows how it is grown, packed, manufactured and prepared for export. (Jr. High through Adult)

TALE OF TWO CITIES (TFC) **(See regulations—last page)**

40 minutes—sound $4.80 8

A condensed school version based on the Charles Dickens novel. This version not only stimulates students in English literature to a further study of this clasic novel but social studies groups will find interesting material in observing the causes of mass rebellion against the aristocracy of France during the revolutionary period. (Jr. High through College)

TARGET FOR TODAY (OWI)

93 minutes—sound $1.80 3

TARGET FOR TODAY is the most comprehensive story ever-told of air bombing mission, and is perhaps the most complete combat factual film produced by the United States. It was produced, directed, and edited by Lt. Col. William J. Keighley, Chief of the Motion Picture Services Division, Office of Assistant Air Staff Intelligence. It tells the story of a bombing raid from the planning stage, through briefing, take-off, flight, "bombs away," and return home, report of the fliers to intelligence officers and what is done with the information brought back. The cast is the famous 8th Air Force. (Sr. High through Adult)

Unit Value

TARHEEL FAMILY (NCRUC)

22 minutes—sound—color $1.20 2

A study of the human, natural and social resources of North Carolina. Specifically covered are: agriculture, conservation and industrial development, wildlife, labor welfare, health and education. (Elementary through Adult)

TARHEEL STATE (NCCD)

29½ minutes—sound—color $1.00

A comprehensive study of North Carolina, which deals with the resources, industry, agriculture and history of the South's leading state. (Elementary through Adult)

TARHEEL WILDLIFE (NCWC)

23 minutes—sound—color $4.20

This film takes us all over the state from mountain streams that are a fisherman's delight, to eastern lakes and inland waters where hunters gather each year to get their legal limit of migratory water fowl. The film stresses the importance of our wild life protective agencies and carefully supervised game preserves. Much emphasis is placed on the necessity for sportsmanship and fair play by all citizens, young and old, in order to preserve our wildlife resources for the welfare and enjoyment of everyone. (Elementary through Adult)

TEACHER CRISIS (MOT)

17 minutes—sound $1.80 3

The educational scene today is portrayed objectively, for visits to America's classroooms and school board meeetings reveal discontented and ill qualified teachers on the one hand and disinterested community attitude on the other. Overwork and low pay are but two of the problems which have driven teachers to abandon the dignity of their profession, to organize into unions and to go out on strike against conditions they consider no longer tolerable. Points out some of the handicaps under which teachers are working, the danger to the community of present conditions, and the necessity of making teaching a well-paid profession. (College and Adult)

TEACHERS FOR NORTH CAROLINA (NCEA)

13 minutes—color—sound $1.00

Presented here is the N. C. teaching situation, the teacher supply and demand, pupil increases, and the underlying causes of such a situation—primarily the lack of adequate salaries.

TECHNIQUES OF ORGANIC CHEMISTRY, Part 1 (YA)

11 minutes—sound—color $3.00 5

The purpose of this film is for instruction in laboratory work of a college course. Equipment; fractional distillation melting point determination; Rast determination of molecular weight. (College)

TECHNIQUES OF ORGANIC CHEMISTRY, Part 2 (YA)

20 minutes—sound—color $4.20 7

Contents of this film are equipment, solubility tests, procedure for crystallization, clarification, cholesterol from gall stones, collection of a precipitate, supersaturation. (College)

Unit Value

TECHNIQUES OF ORGANIC CHEMISTRY, Part 3 (YA)

11 minutes—sound—color $3.00 5
Contents of this film: Extraction, countercurrent distribution, elution chromatography. (College)

TECHNIQUES OF ORGANIC CHEMISTRY, Part 4 (YA)

18 minutes—sound—color $4.20 7
Martius Yellow; a synthetic sequence involving preparation of the yellow dye and of six derived compounds. (High School and College)

TEETH (EBF)

11 minutes—sound $1.80 3
Animated drawings and direct photography present four vital problems in connection with teeth: how teeth develop and grow; which foods help to build strong teeth; how to brush the teeth; and how the dentist cares for our teeth. (Jr. High through Adult)

TEHUANTEPEC (OIAA)

10 minutes—sound—color $1.20 2
A visit to one of Mexico's most attractive villages—Tehuantepec. The film is a beautiful, colorful picturization of Mexican village life with its thatched roofs, picturesque countryside, and its faithfully preserved traditions. (Jr. High through Adult)

TELEPHONE HOUR (AT&T)

23 minutes—sound $1.20 2
A network broadcast showing the activities of technicians. Features the Bell Telephone orchestra conducted by Donald Voorhees with Josef Hofmann, pianist, as guest soloist. (Jr. High through Adult)

TERRACING IN THE NORTHEAST (USDA)

11 minutes—sound $1.20 2
A soil conservation service film. Beautiful scenes of the countryside unfold as we learn how terracing is done—frequently to take care of serious soil erosion situations. Terracing is used successfully for growing potatoes, tobacco, truck farming and for fruit culture. It is necessary to inspect the terraces regularly, and to keep the channels of the outlets clear. Much of America's oldest farming land is in this section. (Sr. High and Adult)

TERRITORIAL EXPANSION OF THE U. S. (INT. GEO.)

22 minutes—sound $2.40 4
1783-1853. This film shows graphically the growth of this country from colonial times to its present continental size, exclusive of territorial possessions. This growth is depicted in chronological order in a manner designed to accord with that in which American history is taught in the classroom. Animated maps are used extensively to illustrate points, and the various boundary disputes are clearly explained. These maps are supplemented with authentic representations of history's great events. A review map at the end of the film re-emphasizes dates of various territorial acquisitions. (Elementary through College)

Unit Value

TERRITORIAL POSSESSIONS OF THE U. S. (INT. GEO.)

22 minutes—sound $2.40 4

Continues the story of American expansion begun in "Territorial expansion of U. S. from 1783 to 1853." The picture explains how Alaska, the Canal Zone, Hawaiian Islands, the Philippines, and the other far-flung insular possessions of the U. S. were acquired. Historic events pertinent to the acquisitons are portrayed. In addition views are presented making the student familiar with the distant possessions of the United States. Animated maps are used and the acquisition of the territories is presented in chronological order. The value of the territories, both commercial and strategic, is set forth. (Elementary through College)

TESTING INTELLIGENCE WITH THE STANFORD-BINET (IndU)

18 minutes—sound $2.40 4

Produced primarily to give an overview of the types of items and the method of administration employed. Not designed to teach students how to administer the test. (College)

TEXAS (MOT)

11 minutes—sound $1.80 3

Here is the Lone Star State, shown in impressive scenes that reveal its almost legendary wealth. Rich in sulphur, oil, mercury, its mines can produce nearly every mineral necessary to modern life. Whole nations could subsist for months on the surplus of its wheat output. (Jr. High through Adult)

TEXAS AND ITS NATURAL RESOURCES (BM)

25 minutes—sound—color $1.20 2

The first part of this film is devoted entirely to the mineral industries of Texas, especially petroleum, while the last part deals with water resources, agriculture, communications, and cities. (Elementary through Adult)

THE NOSE (STRUCTURE AND FUNCTIONS) (EBF)

11 minutes—sound $1.80 3

Splashing through puddles on a cold day without proper footgear violates a basic health rule. Making effective use of animation and microphotography, this film illustrates the ingenious protective system of the breathing organs and shows the reasons for breakdowns in the nasal passages. (Hygiene)

THEN IT HAPPENED (USDA)

11 minutes—sound—color $1.20 2

An account of the 1947 Maine forest fires which caused huge losses in property and natural resources. Shows small fires, which were started by human carelessness, spread in the dry October leaves and brush. (Elementary through Adult)

THEORY OF FLIGHT (EBF)

11 minutes—sound $1.80 3

Illustrates the application of physical laws to forces acting on airfoils. Wind tunnel tests and drag on plain and cambered airfoils. Control of airplane movements about vertical, lateral and longitudinal axis by means of the rudder, elevator, and ailerons

Unit Value

is demonstrated in pitching, rolling, and yawing. (Jr. High through College)

THERE'S MORE THAN TIMBER IN TREES (USDA)

33 minutes—sound—color $1.20 2

An old lumberjack carries you back to the "hell roaring nineties," and takes you through the cutting of the virgin forests in New England, the Lake States, the South, and finally winds up in the Pacific Northwest. The effects of forest-cutting practices on labor, the need for a nation-wide forest program to stop destruction of the resources, to keep forests producing, and to furnish more permanent jobs, better and more permanent communities are shown. (Jr. High through College)

THERMODYNAMICS (EBF)

11 minutes—sound $1.80 3

Sequences deal with selected heat phenomena in advanced form. Molecular action in heat transfer, phenomena of combustion, mechanics of the steam engine, steam turbine, automobile and Diesel engines are explained in detail. The first and second laws of thermodynamics are explained. (Jr. High through College)

THEY DO COME BACK (TB)

17 minutes—sound $1.20 2

The story of Roy and Julie, two young people who work for a living and plan to marry. Tuberculosis interrupts their plans. Roy has advanced tuberculosis—Julie is an early case. Both are admitted to the sanatorium. We see some characteristic tuberculosis association activities and the close working relationship of voluntary and official health forces. The time comes when Roy and Julie are able to realize their plans for a home of their own because they acted promptly. (Sr. High through Adult)

THEY NEED TO KNOW (UW)

13 minutes—sound $1.20 2

A dramatic skit illustrates the importance of being familiar with the rights and benefits due survivors when the wage earner is covered by Social Security. (Sr. High through Adult)

THINGS EXPAND WHEN HEATED (YA)

10 minutes—sound $1.80 3

Demonstrates by animation and simple photography the movements of molecules before and after heat is applied, showing that their accelerated movement requires more space and therefore causes expansion. Uses many concrete examples of expansion and contraction from everyday life. (Elementary and Jr. High)

THIRTY-SIX WEEKS BEHAVIOR DAY (EBF)

10 minutes—sound $1.80 3

The infant boy whose behavior day at 12 weeks was charted is now 36 weeks old. He has made striking progress. His reactions are compared with those which he experienced twenty-four weeks earlier. An animated clock announces the changing events of the day's schedule. (Sr. High through Adult)

Unit Value

THIRSTING STONES, THE (CORONET)

15 minutes—color—sound $4.80 8
"Greed does not pay" might well be the subtitle of this familiar old tale. The triumph of the shepherd-boy hero over the evil Oliver Sly is a lesson in faith and goodness and its ultimate rewards. Good action, a pastoral setting and an unusual tale about the stones that revealed a treasure are blended here to give both education and entertainment. (Kindergarten, *Primary*, Intermediate)

THIS IS ALUMINUM (BM)

28 minutes—sound $1.20 2
The mining and preparation of aluminum ore and the fabrication of the metal and its alloys are related, in an interesting manner. Opening with the mining of bauxite, the film depicts the various processes which result in pure aluminum. Then the various fabricating processes are shown. (Jr. High through Adult)

THIS IS ECUADOR (OIAA)

20 minutes—sound $1.20 2
Scenes of the Galapagos Islands, of Ecuadors resources, of Quito, and of the life of the Indians in the primitive rural sections. (Jr. High through Adult)

THIS IS THE MOON (YA)

10 minutes—sound $1.80 3
This film explains the relation of the moon to the sun and the earth, how the moon gets its light, the phases of the moon, and its physical characteristics. (Elementary and Jr. High)

THIS IS THE UNITED NATIONS, I (UNFILM)

15 minutes—sound $1.80 3
Presents the story behind these headlines: "General Assembly Acts to make Jerusalem an International Area;" "Under International Civil Aviation Organization, Twenty-five Weatherships Promote Safety at Sea;" "The Nations Fight Tuberculosis—25 Milllion Children Tested:" "East and West Unite in Voting Aid to Underdeveloped Countries." (Elementary through Adult)

THIS IS THE UNITED NATIONS, II (UNFILM)

12 minutes—sound $1.80 3
Presents the story behind these headlines: "President Romulo Urges Accord on Atomic Energy;" "Unique Method of Interpretation Assist at U. S. Meeting;" "U. N. Children's Emergency Fund Helps Feed 6 Million Children, Clothe 2 Million." (Elementary through Adult)

THIS VITAL EARTH (EBF)

10 minutes—sound—color $3.60 6
The relation of life to its environment is shown through the balance of plants and animals. Explains that plant and animal relationships are essential to survival. (Elementary through Adult)

THOMAS JEFFERSON AND MONTICELLO (VA-DC)

40 minutes—sound—color $3.60 6
This picture gives some of the highlights of Jefferson's notable

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career. It was made under the auspices of the Thomas Jefferson Bicentennial commission appointed by Congress to commemorate the two-hundredth anniversary of Jefferson's birth. (Elementary through Adult)

THOUSAND DOLLARS FOR RECREATION (AI)

12 minutes—sound—color $1.20 2
Colorful scenes of interesting phases of outstanding community recreation accomplishments in two American towns. It offers sound advice on how service clubs and other community organizations can invest wisely in a complete recreation program for their community. (College and Adult)

THREE COUNTIES AGAINST SYPHILIS (PUB. HEALTH)

17 minutes—sound $1.20 2
How control of syphilis is effected in three counties in Georgia; portable clinic; methods used; enlarged views of spirochetes. (College and Adult)

THREE FOX FABLES (EBF)

10 minutes—sound $1.80 3
With superb real life photography this delightful film recaptures all the fascination and charm of three of Aesop's best loved fables "The Fox and the Grapes," "The Fox and the Crow," and "The Fox and the Stork." Ingenious direction of real animals in attractive woodland settings brings to life the famous stories told and read and loved for centuries. (Primary)

THREE LITTLE KITTENS (EBF)

10 minutes—sound $1.80 3
Discovered in the barn with their mother by a farmer's wife these kittens provide an opportunity for learning about the characteristics of cats in general. When about two weeks old they are carried by their mother to a new home in an old buggy, where they learn to eat, clean themselves, and to play. Later they have a skirmish with a dog and learn to catch mice. (Primary and Elementary)

THREE SQUARES, THE (USDA)

13 minutes—sound—color $1.20 2
Modern man eats better than kings and knights of old, and as a consequence, he is bigger and healthier. Through scientific methods, we produce more and better food; efficient high speed equipment enables us to move perishables in record time; and we have perfected new and better ways of preserving foods. A French chef named Appert discovered that food could be kept long periods of time if sealed in cans and thoroughly heated. The canning industry, only 150 years-old, has helped to revolutionize our diet. (Jr. High through Adult)

THREE TO BE SERVED (NAM)

27 minutes—sound $1.20 2
Through the experience of a group of high school youngsters in starting their own business, this film shows the fundamentals which underlie all business. Shows how management must serve customers, workers, and investors, and must reconcile the de-

Unit Value

mands of all three, in order to make any business venture successful. (Jr. High through Adult)

THREE WISHES, THE (CORONET)

10 minutes—color—sound $3.60 6

This is the rollicking comedy of the shrewish Katherine and her simple husband John. who lost the bright promise of three magic wishes by wasting them carelessly. Here is a little morality lesson brightly told with gaily-costumed actors, carefully designed sets and crisp comic action. (Kindergarten, *Primary*, Intermediate)

THUNDER & LIGHTNING (YA)

10 minutes—sound $1.80 3

Explains the phenomena of thunder and lightning in simple terms, using this as a springboard for understanding static electricity. Shows that by rubbing certain objects together we cause them to become charged with electricity; that like charges repel and unlike charges attract; that in a similar manner clouds become charged, and that lightning results when they discharge. Also discusses protective measures against electrical storms. Elementary and Jr. High)

TIME FOR GREATNESS, A (ASSN F)

27 minutes—sound $1.20 2

Expresses moral concern over the use of military force as the chief instrument of foreign policy. Surveys what the Quakers have learned about securing peace and understanding between peoples of other nations as a result of the many years of experience derived from the work of the American Friends Service Committee. (Sr. High through Adult)

TIME IS LIFE (AM. CANCER)

10 minutes—sound $1.20 2

Presents a story of cancer and the work of the Field Army. This film has a three-fold purpose: first, emhasizing the importance of seeking early medical advice when a cancer danger signal appears; second, the purpose and activities of the Field Army; and third, a discussion of the cancer treatment and the hope of cure. (College and Adult)

TINY WATER ANIMALS (EBF)

10 minutes—sound $1.80 3

Life processes and activities of amoebae and paramecia are shown with the activities of the amoebae given major emphasis. Reproduction of amoebae is presented. Reveals other interesting creatures, such as the wheel animalcule, and swan animalcule. (Sr. High through College)

TIPS FOR TEACHERS (JH)

20 minutes—sound $2.40 4

Presents the three "P's" of good teaching. Explains the place and value of the Teacher's Personality, dramatizes the importance of Preparation, and gives a living example of how the Presentation of the material is done best. The photography is in the classroom. Analogies are introduced to show how the teacher must use showmanship, salesmanship, and the ability of an actor to help in shortening the learning process. (College and Adult)

Unit Value

TOBACCO AND THE HUMAN BODY (EBF)

14 minutes—sound $2.40 4

An authentic report on the scientific results of modern research, evaluating the effects of the use of tobacco. This film analyzes the contents of tobacco smoke and demonstrates some of the physiological effects of smoking. It also sums up the factors to be considered in deciding whether or not to smoke. (Biology and Hygiene)

TO LIVE TOMORROW (ASSN F)

13½ minutes—sound $1.20 2

A flash fire in the kitchen . . . a blaze in a theatre . . . an enemy attack. How would you and other Americans react? This dramatic film probes several situations, studies the reactions of various individuals, shows how leadership, training, mental conditioning can prevent panic. (Sr. High through Adult)

TOMMY THE LION (YA)

12 minutes—sound $1.80 3

The story of a typical day in the life of a pet lion cub with his owners, Mr. and Mrs. Owens, of Garden City, Kansas, during which Tommy plays with the children, visits school, and makes a trip to his veterinarian. The story structure points up the parallel between Tommy's daily life and habits and those of the children. (Primary)

TOMMY'S DAY (YA)

15 minutes—sound $1.80 3

In this film we follow Tommy through a healthy, happy day in his life at home and school, observing how he follows the simple health habits which are necessary for him to grow healthy and strong. Major emphasis is placed upon the discovering of a loose tooth and its importance to the child. Good health habits and proper diet are stressed to insure proper growth. (Primary and Elementary)

TORMENT OF BEETHOVEN, THE (YA)

27 minutes—sound $3.00 5

October 6, 1802, the critical day when the great composer is at last certain that deafness will overtake him. A dramatic insight into Beethoven's life, with excerpts from some of his great works. (Junior High through Adult)

TOWN IN OLD MEXICO (OIAA)

10 minutes—sound—color $1.20 2

Puebla, Orizaba, and Fortin de las Flores are the three villages seen in this film. Seventeenth Century buildings of extraordinary architectural merit, and interiors of homes still in use are shown as classic examples of the architecture of the Spanish conquistadores. In Fortin de las Flores, flowers grow in such profusion they perfume the countryside for miles around. (Jr. High through Adult)

TOYS FROM ODDS AND ENDS (BRANDON)

10 minutes—sound $1.80 3

Produced in cooperation with the Universal School of Handi-

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crafts. There is a brief display of several articles made from odds and ends of cloth, wool, rubber, yarn, etc., and then a detailed demonstration of the making of a small woolly dog is given. (Elementary through Adult)

TRAGIC HOUR OF DR. SEMMELWEISS, THE (YA)

27 minutes—sound $3.00 5

October 10, 1850, Dr. Semmelweiss is dismised from his Vienna Hospital because of his fight to prevent child-bed fever which, he believes, is due to inattention of the medical profession to sanitary conditions. Portrays a significant highlight in man's fight against superstition and ignorance. (Junior High through Adult)

TRAITOR WITHIN (AM. CANCER)

11 minutes—sound—color $1.20 2

The telling of the story of cancer, the cell growth, the lawless multiplication of gangster cells, the spreading of cancer by the lymph nodes, and the possibilities of curing and controlling the disease through the use of surgery, X-Ray and radium. (Jr. High through Adult)

TRAVEL—THE TOURIST'S EUROPE (MOT)

25 minutes—sound $1.20 2

Preparations for trip to Europe. Depicts scenes in Paris, Switzerland, Rome, Venice, and England.

TREASURE ISLAND (TFC) (See regulations—last page)

40 minutes—sound $4.80 8

Produced by Metro-Goldwyn-Mayer in 1943 and based on the well known story of Robert Louis Stevenson. Re-edited from the feature film. Starring Lionel Barrymore, Wallace Beery, and Jackie Cooper. (Elementary through College)

TREASURES FOR THE MAKING (PATHESCOPE)

20 minutes—sound—color $1.20 2

Step-by-step demonstration of jam and jelly making by the short-boil (pectin) method and long-boil method. Includes sequences on the use of frozen and dry fruits, bottled and canned juices and fresh and canned fruits. (Jr. High through Adult)

TREE BANK (USDA)

12½ minutes—sound—color $1.20 2

This film shows how tree planting fits into America's Agricultural Soil Bank program. Interestingly illustrated are the values of tree plantations in conserving soil and water, providing shelter for wildlife, and providing recreational opportunities for the farm family, and as a source of additional cash income. Nursery and tree planting practices are shown. (Sr. High through Adult)

TREE OF LIFE (USDA)

25 minutes—sound $1.20 2

Portrayal of how the forestry resources of the U.S. have been depleted to the extent that regulated cutting is now necessary on both public and private timberland. Animated graphs comparing early population and forest lands to those of the present. Illustrations of how unregulated and complete stripping of forest

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land leaves ghost towns and floods in its wake. Methods of conservation: National Forests produce permanent supply by means of selected cutting; fire protection by lookout towers. Indications of the need for selected cutting on private lands. (Elementary through College)

TREES FOR TOMORROW (AFPI)

19 minutes—sound $1.20 2

Unusual outdoor photography, filmed in various forest regions, shows industry's up-to-date technique of forest conservation. Trees are a crop—one of nature's most beautiful. They need proper care and protection to give us endless harvests of vital forest products. Forest management is our insurance for the future. In this film are seen the modern methods of forest fire spotting and fighting as well as the constant replacement of the tree crop. Ingenious uses for wood in modern products are revealed in the motion picture, including lumber, paper, plywood, vital chemicals, cellophane, plastics and even clothing. (Elementary through Adult)

TREES TO TAME THE WIND (USDA)

13 minutes—sound 1.20 2

The planting of windbreaks and shelterbelts in the prairie states, where farmers are cooperating with the U.S. Forest Service in one of the most unusual tree-planting programs ever undertaken in an effort to reclaim land ruined by wind and drought. (Jr. High through Adult)

TREES TO TRIBUNES (ChiTrib)

45 minutes—sound—color $1.20 2

Illustrates the various steps required to produce a metropolitan newspaper. The scenes begin in the timberlands of Canada and end with delivery of the newspaper to the reader. (Elementary through College)

TRIPLE THREAT OF BRUCELLOSIS (USDA)

27 minutes—sound—color $1.20 2

Brucellosis is a disease which takes from the farmer and stockman huge revenues in lost meat and milk. Brucellosis each year infects over 1,000,000 dairy cows causing abortion and sterility. A similar number of beef cattle, swine, and goats are infected. Humans also suffer attacks in acute and chronic forms. The film shows the nature of the disease and recommends four methods for control and eradication. It contains historical data on the development of vaccines. (High School through Adult)

TRIUMPH OF ALEXANDER THE GREAT, THE (YA)

27 minutes—sound $3.00 5

324 B. C., Alexander the Great suppresses a mutiny among his soldiers in Babylonia by convincing them he is trying to achieve "harmony among all the peoples of earth," exemplifying man's highest desire for a better life for all. (Junior High through Adult)

TRIUMPH OF LOUIS BRAILLE, THE (YA)

27½ minutes—sound $3.00 5

A young instructor in the National Institute for the Young Blind in Paris developed a new-method for reading and writing for the

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blind. Louis Braille, himself blind, must work in secrecy, for the Institute has forbidden the teaching of his method. The blind concert pianist, Therese von Kleinert, begins giving testimonies to Braille's method after each of her concerts. Emperor Louis Napoleon orders the method be demonstrated at the Paris Exposition of 1855. Braille, however, had died three years before of tuberculosis. (Junior High through Adult)

TROOP TRAIN (OWI)

11 minutes—sound $1.20 2

Gives an impressive picture of the skill with which the Army and the American railroads are doing their job. It takes 75 trains, and a lot of cooperation to move one single armored division. (Jr. High through Adult)

TRUCK FARMER (EBF)

11 minutes—sound $1.80 3

Treats the geography of the Rio Grande delta and provides authentic recordings of the problems and activities of a truck farmer and his family. The labor question with respect to the employment of Mexican families for field work is portrayed. Planting, irrigating, spraying, harvesting, packing, and shipping truck crops are shown in detail. (Elementary through Sr. High)

TRUE STORY ABOUT HOSPITALS, A (IMPACT FILMS

11 minutes—sound—color $1.20 2

This film seeks to remove fears children may have about hospitals. By explaining everything that might happen to a child and giving him reasons for certain practices, the true story is presented and the fearful aspects removed.

TUBERCULOSIS (EBF)

11 minutes—sound $1.80 3

Demonstrates the nature, transmission, diagnosis and treatment of pulmonary tuberculosis. It dramatizes the case of Mary Smith, a young girl who gets the disease from her aunt and goes to a sanatorium where she gets proper care and is cured. An excellent film for use in hygiene, human biology, and public health courses, as well as for general adult usage in public health education. (Jr. High through College)

TUNISIE, PERLE DU DJIRID (Tunisit, Pearl of the Djirid) (FA)

12 minutes—sound $1.20 2

The people of Tunisia are shown in their everyday way of living, working and worshipping. Native language and music included. Accompanying the film is a copy of the narration in English and French. (Sr. High and College)

TURKEY—KEY TO THE MIDDLE EAST (BIS)

20 minutes—sound $2.40 4

Considers the position of Turkey in relation both to its own past and to the state of present world affairs and includes a short history of this important strategic country over the last thirty years.

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TURNING WORK OF TWO DIAMETERS (C)

15 minutes—sound $1.20 2
Discusses operations followed when turning a gear blank with its shaft from a solid piece of round stock. Procedures and precautions used when turning to close tolerances. The establishment of a reference point and its constant use are emphasized. (Sr. High through Adult)

TWO LITTLE RACCOONS (YA)

10 minutes—sound $1.80 3
An animal story for young children. The amusing adventures of Randy and Wilbur Raccoon, two young raccoon twins, and of all the things they see and do on a day away from home. (Primary)

TWO VIEWS ON SOCIALISM (CORONET)

16 minutes—sound $2.40 4
This is an important film for every American to see. It is specially designed to stimulate an intelligent discussion on the difference between socialism and capitalism. It will help students gain a necessary and clear understanding of socialism. The basic charges levelled by socialists against the capitalistic society are made and effectively answered in this film. (Jr. and Sr. High)

TWO WAY STREET (OWI)

8 minutes—sound $1.20 2
Gives an account of how lend-lease worked from its start up to the present. (Jr. High through Adult)

TYPING—ADVANCED (USOE)

30 minutes—sound $1.80 3
Stresses the importance of having equipment arranged for speed. Shows how to use the tab stops, tabulator key, make erasures, insert missing letters draw lines, centering, etc. (Sr. High and College)

TYPING—BASIC (USOE)

30 minutes—sound $1.80 3
Demonstrates the proper posture, stroking of keys and the principal parts of the machine. (Sr. High and College)

UGLY DUCKLING (EBF)

11 minutes—sound—color $3.60 6
A charming adaptation of the classic fairy tale by Hans Christian Andersen. Highlights the adventures of a little swan who is raised with a brood of ducklings and rejected by all because he does not conform to the appearance of a duck. Finally, after many discouraging experiences the ugly duckling discovers his true status as a swan of beauty and dignity. (Primary)

UNCONDITIONAL SURRENDER (NATIONAL FOUNDATION FOR INFANTILE PARALYSIS)

24 minutes—sound $1.20 2
A dramatic lesson in science, made easy for the layman, and of interest to professional groups. It pictures for the first time the step-by-step manufacture of the vaccine in a great pharmaceutical

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laboratory. It is a story of human interest, featuring colorful personalities: David Eisenhower and the President; Randy Kerr, first to receive the vaccine in 1954; Dr. Jonas Salk, who put the vaccine puzzle together. This film is science made human, warm, and exciting. (Jr. High through Adult)

UN GRAND VERRIER (A Great Glassblower) (FA)

12 minutes—sound $1.20 2

An outstanding artist-artisan is shown at work in the quarters of a glass factory, where he is permitted to carry on his original creations after hours. A large portion of the film has no verbal narration, but an original musical score to accompany the artist as he plans and executes his work of art. (Sr. High and College)

UNDERSTAND YOUR EMOTIONS (CORONET)

14 minutes—sound $2.40 4

A general understanding of emotions, what they are, where they come from and how they are changed is developed by this motion picture. It reveals that emotions have many effects on the body, both on voluntary behavior and on involuntary behavior. By showing different emotional responses to the same stimulus which is largely the result of conditioning, the film explains the process of conditioning at work—first in animals, then in human beings. (Jr. High and Sr. High)

UNDERSTANDING BASKETBALL (YA)

10 minutes—sound $1.80 3

An unusual film whose purpose is to explain the game of basketball to the *spectator*. A basketball coach explains the basic rules and play of the game, including such things as scoring, fouls, etc. He also points out the common rules of courtesy to be followed by spectators. (Elementary and Jr. High)

UNDERSTANDING VITAMINS (EBF)

14 minutes—sound—color $4.20 7

Graphically explains what vitamins are, how they work and why they are necessary for good health. Points out natural sources of important vitamins and reveals the effects on body tissues of a diet lacking in certain vitamins. Recreates major events in the discovery of vitamins and calls attention to present-day research. (Jr. and Sr. High)

UNDERSTANDING YOUR IDEALS (CORONET)

14 minutes—sound $2.40 4

What are ideals? Why are they so important to well-being and happiness, and what do they have to do with character? These and other questions about ideals are answered in this film. A high school boy who has false conceptions of ideals finds the right objectives and goals for which to aim. Specifically, this motion picture tells and shows what ideals are, and how they influence and are influenced by character. (Jr. and Sr. High)

UNE FAMILLE BRETONNE (EBF)

11 minutes—sound $1.80 3

This French language film tells the story of family life on a farm in Brittany in Western France, including the work of each

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member of the family, and scenes of activities in the village school and neighboring town. Told in simple French. (Sr. High through Adult)

UNITED NATIONS IN WORLD DISPUTES (C)

21 minutes—sound $1.20 2

Reviews four major disputes that since 1945 have threatened world peace—Indonesia, Palestine, India and Korea—and demonstrates how the UN was successful in resolving each one. (Sr. High through Adult)

UNITED STATES (BIS)

44 minutes—sound $3.00 5

A documentary-type presentation of the historical development, economic forces, and sociological characteristics of the United State—yesterday and today. Perhaps the best presentation of the early history of America up through the Revolution yet produced, with the causes of the Revolution astonishingly candid. (Jr. High through Adult)

U. S. COMMUNITY AND ITS CITIZENS (UWF)

20 minutes—sound $3.00 5

The fact that all of man's needs cannot be satisfied directly from the earth and that to supply many of these needs, people live together in communities is lucidly portrayed in the film. In a community which has thousands of counterparts throughout this country and many parts of the world, we see the actual functioning of community life and services as we spend a day with a group of school children who are making a survey of their town as a school project. (Elementary through Adult)

URUGUAY (OIAA)

16 minutes—sound $1.20 2

A study of Uruguay which, in many ways, resembles the United States in its liberal, independent, and advanced social and political life. The relative ease, wealth, and contentment of its people are indicated as well as the agricultural and economic basis of the country's good fortune. (Elementary through Adult)

USING THE BANK (EBF)

10 minutes—sound $1.80 3

By means of animated drawings, live action photography and direct sound, this film dramatizes the ways in which banks perform savings account, checking account and loan services for the citizen. Close-up photography gives students an intimate acquaintance with many banking operations making relevant arithmetic problems more meaningful. (Elementary through Sr. High)

USING THE CLASSROOM FILM (EBF)

22 minutes—sound $2.40 4

Demonstrates an approved procedure for teaching with motion pictures. The film used for demonstration is Wheat Farmer. (College and Adult)

VACUUM TUBE IN RADIO (EBF)

10 minutes—sound $1.80 3

Animated drawings clearly shows the way in which vacuum tubes

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work. The three functions of the vacuum tube in radio are carefully explained; how it serves in amplifying current to operate the loudspeaker, how it is used as a rectifier in detection, and how it is used as an oscillator tube in the transmission station to produce the carrier wave. (Sr. High and College)

VELOCITY OF CHEMICAL REACTIONS (EBF)

10 minutes—sound $1.80 3

Describes, with photography and animation, the effect of the nature, concentration, and the temperature of reacting substances on the rate of chemical reactions. Practical examples with wood, aluminum, iron, and other substances are given to illustrate these phenomena. The dynamics of reversible reactions and of chemical equilibrium are shown by schematic drawings that give clear conceptions of rather abstruse processes. (Sr. High and College)

VENEZUELA (OIAA)

10 minutes—sound $1.20 2

Describes the capital city of Caracas and the port of La Guaira, sugar plantations, and colonial forts and trails. (Elementary through Adult)

VENEZUELA MOVES AHEAD (OIAA)

40 minutes—sound—color $1.20 2

An analysis of Venezuela from an economic, historical and geographic viewpoint. Excellent use is made of animated maps, and much attention is given to Venezula's principal industry—oil. Interesting scenes show the unusual modern development of Caracas, Venezuela's capital city. (Jr. High through Adult)

VERACRUZ (OIAA)

18 minutes—sound—color $1.20 2

We are conducted on a trip through Mexico's province of Veracruz. Varicolored flowers, odd native clothes and customs and the colorful panorama of the quiet countryside make for a delightful film. (Jr. High through Adult)

VICIOUS CIRCLE, THE (WCTU)

12 minutes—sound $1.20 2

Traces the downfall and rehabilitation of a man who used alcohol to attempt to escape from reality. (High School through Adult)

VILLAGE SCHOOL (BIS)

12 minutes—sound $1.20 2

This film beaming with human interest, humor, and pathos shows how the children of England are bearing up under the terrific strain. Should be shown to groups for its character-training value. Our students of education, both in-training and in-service can see themselves as the camera sees them and can better understand the philosophies of education of this country by studying the philosophies of others. (Jr. High through Adult)

VISIT TO IRELAND (CORONET)

10 minutes—sound $1.80 3

Providing a substantial background of general information on Ireland and its people is the primary objective of this film. Audiences

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will see how the people in Ireland live, travel and trade in the picturesque setting of Ireland's mountains, lakes, valleys and hill lands. An excellent introduction to Ireland's literature is provided by picturing the land and activities that inspired so much of the country's poetry and writings. (Elementary)

VISIT WITH COWBOYS (EBF)

10 minutes—sound $1.80 3

A city boy visits a real western ranch for the first time in his life and sees cowboys rounding up, roping and riding horses; watches cowmen roping and branding calves; meets a fence rider at work; helps to shoe and feed horses; and ends his visit in the excitement of a big-time rodeo. (Primary and Elementary)

VITAMIN RIVERS

22 minutes—sound—color $1.20 2

Shows how great advances in canning processes have made possible the development of vast areas of the United States and in turn, how this development has promoted the health of the people of the nation. (Jr. High through Adult)

VOCAL MUSIC (EBF)

10 minutes—sound $1.80 3

Describes the basic techniques of singing such as good posture, controlled breathing, relaxation, use of resonators, and clarity of diction. Emphasizes the joys to be found in singing, as well as the work necessary to produce a trained voice. Reviews the structure of the vocal instrument and illustrates common faults found in beginning students of vocal music. Several examples of good vocal music are included. (Jr. and Sr. High)

VOLCANOES IN ACTION (EBF)

10 minutes—sound $1.80 3

Presents the history, causes, distribution, and effects of volcanic action. Animated drawings describe the formation of batholiths; dikes; sills; laccoliths; mineral deposits; cinder, and lava cones; lava sheets; and volcanic eruptions, with special reference to Krakatau. Actual photography illustrates the same phenomena. The destructive forces of volcanoes in eruption are shown. Sound effects enhance the dynamic appeal of the film. (Jr. High through College)

VOLLEYBALL FOR BOYS (CORONET)

10 minutes—sound $1.80 3

This film is a challenge to both the beginner and the expert. It demonstrates how to serve, volley, and spike the ball covering the methods of offensive and defensive pay by regular and slow motion photography. It includes ways of modifying the game to make it suitable for the age and size of the playing group. This gives the film an unusually broad application. (Jr. and Sr. High)

VOYAGE TO RECOVERY (OWI)

10 minutes—sound $1.20 2

The Navy tells the deeply moving story of the complex treatment involved in caring for its wounded. The camera follows the wounded men to the operating room and then through the many

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therapeutic facilities of the hospital. Costly electrical therapy machines, hydrotherapy apparatus, massage, bicycle exercise and sequences of occupational therapy, and the part all these play in recovery is portrayed graphically. The film ends with the discharge sequence—the man going home, as nearly whole as medical skill and care can make him. (Sr. High through Adult)

WAR CAME TO AMERICA (AFS)

Part I 20 minutes—sound $1.20 2
Shows, through scenes taken from theatrical motion pictures the outstanding historical events in the establishment of the U.S. (Jr. High through Adult)

Part II 30 minutes—sound $1.40 2
Tells the story from September 1939 until December 1941. (Jr. High through Adult)

WAR IN EUROPE (C)

11 minutes—sound $1.20 2
This film has historical vaue in that it shows the invasion of Poland, declaration of war by Britain and France, and other war scenes. (Jr. High through Adult)

WAR ON WHEELS (OWI)

22 minutes—sound $1.20 2
Directed principally at the men and women of the automotive industries to show them the combat performances of the vehicles they have built. What it took to get a mechanized convoy through in the North African campaign serves as an illustration. (Jr. High through Adult)

WARDENS OF WATERTON (NFB)

12 minutes—sound—color $1.20 2
Every summer thousands of visitors come to Waterton Lakes National Park to enjoy its mountain grandeur, fishing, swimming and all the other attractions that make for summer enjoyment. This film takes us along on a tour of large-scale outdoor housekeeping. We see the wardens organize and administer the Park's services, and how they protect wildlife. (Jr. High through Adult)

WASHINGTON AND ITS NATURAL RESOURCES (BM)

26 minutes—sound—color $1.20 2
Portrays the varied resources of land, water, minerals and forests, the diversified agriculture and industry based upon them, and the wide range of scenery, from mountain grandeur to pastoral simplicity, that characterize the state of Washington. (Jr. High through Adult)

WASHINGTON, BOOKER T. (EBF)

20 minutes—sound $2.40 4
Portrays the dramatic story of Booker T. Washington from childhood to the time when he became "probably the greatest Negro in history." Vividly reproduces episodes illustrating his constant struggle to free his people from ignorance, poverty, and fear. Recalls his hardships in obtaining an education, his problem in building Tuskegee Institute, and his tragedies in his private life. Calls attention to his influential Atlanta speech. (Jr. High through Adult)

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WASHINGTON, GEORGE (EBF)

20 minutes—sound $2.40 4

Brings to life the qualities and skills which made Washington, more than anyone else, the builder of the American nation. Portrays the significant events of his boyhood and his role in the French and Indian Wars. Illustrates his trials and triumphs as military leader and as organizer of the movement to frame the Constitution. Reveals his difficulties and successes as President of the United States. (Jr. High through Adult)

WASHINGTON, THE NATIONAL CAPITAL (C)

10 minutes—sound $1.80 3

Shows Pennsylvania Avenue from the Capitol to the White House. State, Navy, and War Departments, the Treasury, Bureau of Printing and Engraving, prominent monuments and other spots of interest. (Elementary through Sr. High)

WASHINGTON'S FAREWELL TO HIS OFFICERS (YA)

27 minutes—sound $3.00 5

December 4, 1783, General George Washington says farewell to his officers at Fraunces Tavern, New York City. A dramatic moment in the life of a great man who had a profound effect on America's future. (Junior High through Adult)

WATCH THAT QUOTATION (CORONET)

10 minutes—sound $1.80 3

Importance of quoting accurately, the general importance of authority behind statements, how to quote in speech and in writing and how to read and to listen to quotations are taught by this film. After viewing the picture, your class members will *watch that quotation* wherever it is found. (Elementary)

WATCHTOWER OVER TOMORROW (OWI)

15 minutes—sound $1.20 2

This film brings to life the Dumbarton Oaks plan for an international security organization and shows how a third world war can be forestalled. The Dumbarton Oaks plan is explained in simple, everyday terms by an offscreen narrator. He traces the growth of the United Nations plan step by step from the Atlantic Charter and Moscow Conference to Bretton Woods and Dumbarton Oaks. Secretary of State Stettiniou tells us that "It has fallen our lot—yours and mine—to live at one of the great crossroads of history—What we do this year of 1945 will decide whether all the sacrifice and sorrow of this war have been in vain, or whether we shall be able, at last to live together in a world free from war." (Jr. High through Adult)

WATER BIRDS (EBF)

11 minutes—sound $1.80 3

Photographic sequences depict the physical characteristics, habits, environment, adaptivity and care of young of the egret, the mallard duck, the Canada goose and the brown pelican. Shorter sequences depict selected facts about the lesser scaup and the flamingo, the winter and summer homes of the Canada goose and the principal migration route. (Elementary through Sr. High)

Unit Value

WATER CYCLE (EBF)

10 minutes—sound $1.80 3

Traces movement of water through its cycle of eternal change from ocean to sky and back to the ocean. Relates evaporation, saturation, condensation and precipitation and in simple terms clearly explains the principles underlying these phenomena. Animated drawings reveal how the water table forms and how water passes through plant bodies and returns to atmosphere. Natural photography vividly depicts surface run-off from the raindrop to the ocean and use of plants and dams to control this run-off. (Elementary through Sr. High)

WATER POWER (EBF)

10 minutes—sound $1.80 3

The concept of potential power from water is introduced by the water cycle which furnishes a never-ending source of power. It is shown how rapids and waterfalls, by use of this, were changed from hindrances to aids to man's progress. The body of the picture traces the development of water power, chiefly in the U. S. from the small mill of the early colonists to such modern projects as Niagara, Boulder Dam and the Tennessee Valley. There is an informative sequence on the transformation of kinetic energy of the waterfalls into potential energy through the hydro-electric plant. Concludes with a world-wide survey of potential water power. (Sr. High)

WATER WORKS FOR US (YA)

10 minutes—sound $1.80 3

Illustrates the many ways in which water works for us in our everyday life. Explains the concept of water pressure, including the factors which govern it. Explains how water works for us in and outside the home as a liquid, as a gas, and as a solid. (Elementary and Jr. High)

WATUSSI OF AFRICA (EBF)

11 minutes—sound $1.80 3

An excellent film showing the daily life of the Watussi tribe of East-Central Africa. (Elementary through Adult)

WAYS TO GOOD HABITS (CORONET)

10 minutes—sound $1.80 3

Children in the lower grade levels are developing the habits which they will have throughout their lives. Instead of merely reiterating the old theme, "Don't do that—that's a bad habit!," this constructive guidance film shows the importance of good habits. Through real, clearly understandable situations it demonstrates how to substitute good habits for bad ones and motivates students to build good habits of their own. (*Primary*, Intermediate)

WAYS TO SETTLE DISPUTES (CORONET)

10 minutes—sound $1.80 3

With this film as a teaching device, disputes can be discussed with a minimum of emotional involvement. Students will see how disputes waste time and rob them of fun. It demonstrates that settlement of disputes must involve give and take, and it emphasizes that the settlement of disputes must be desired if it is to be achieved.

Unit Value

Compromise, obey the rules, find the facts and *find opinions* are given as four ways of settling disputes. (*Primary,* Intermediate)

WE DISCOVER THE DICTIONARY (CORONET)

10 minutes—sound—color $3.60 6
10 minutes—sound—b&w $1.80 3
Three students are assigned the task of writing a letter to a police sergeant. By the time the letter is finished they have learned a great deal about dictionaries, including the use of the guide words, finding the spelling of words, definitions, reading diacritical marks, and that there are many kinds of dictionaries. (Elementary through Adult)

WE EXPLORE THE BEACH (CORONET)

10 minutes—color—sound $3.60 6
This is the story of Betty and Billy as they walk along the beach, discovering many things—a bird's nest, seashells, water animals, As the children play among the tall grasses, as they watch the seagulls feed, they become aware that the beach is alive with plants and animals; that the sea, itself, is rich with life. The film story is one that will create for the child a visual background and deep appreciation for life in and near the sea. (Primary)

WE GO TO SCHOOL (CORONET)

10 minutes—sound $1.80 3
Few children are actually "prepared" for school. There are many adjustments each child must make—and they are seldom easy, so this film is designed specifically to help teachers bring an understanding of school to their classes. Children are shown how to make the normal adjustment from a home to school environment and how a sense of "belonging" is fostered and an attitude of cooperation is stimulated. (Primary)

WE PLAN TOGETHER (TEACHERS COLLEGE)

20 minutes—sound $2.40 4
Prepared to help teachers-in-preparation and teachers-in-service, as well as interested laymen and students, gain a better understanding of the process of cooperative planning in education. It shows an eleventh grade planning cooperatively for learning in their core class over a period of several months. (College and Adult)

WEIGHTS AND MEASURES (EBF)

14 minutes—sound $1.80 3
The film reviews some of the familiar weights and measures which simplify our daily activities—cups and spoons to measure ingredients for cooking; quart, gallon, and bushel containers for marketing foods; and maps to measure distances in miles. The purpose of the measurement in each case determines the kind of weight or measure to be used. To make it more interesting, it follows the activities of a small boy, Tom, as his father measures to build a model railroad, and his visit to his uncle's farm. (Elementary and Jr. High)

WE THE PEOPLES (Y.A)

10 minutes—sound $1.80 3
An orientation film designed to show the various purposes and

Unit Value

functions of the United Nations Organization. Through the combined use of live action and selected animated charts, the film describes fully the basic functions of the six major divisions of the United Nations. (Elementary through Sr. High)

WE VISIT THE SEASHORE (YA)

10 minutes—sound $1.80 3
This film tells the story of a typical day's activities of two young children at the seashore (one a visitor for the first time), how they play in the sand and the water, and the various things they do and see. (Primary)

WEALTH OF THE ANDES (OIAA)

20 minutes—sound—color $1.20 2
A trip to the Cerro de Pasco mining district deep in the Andes Mountains in Peru. Here the "Wealth of the Andes" in the form of copper and lead is mined. Here two of Peru's greatest natural resources are drawn from the earth to serve man. The trip is made on the now-famous Central Railway of Peru, the building of which was one of the greatest engineering feats of all time. (Elementary through Adult)

WEATHER (EBF)

10 minutes—sound $1.80 3
Explains the Polar Front weather theory and describes meteorological instruments and methods and cloud formations. Animated drawings, curves, and maps are shown. (Jr. High through Adult)

WEBSTER, DANIEL (EBF)

20 minutes—sound $2.40 2
Traces the development of the qualities and skills which made Daniel Webster a distinguished lawyer, the orator of his day, and a spokesman for American national unity. Portrays the political events which influenced him to be first a states' rights man and defender of the trading interests of New England, and later, the nation's most eloquent advocate of strong national power and unity. (Jr. and Sr High)

WEIGHT EVENTS (EBF)

11 minutes—sound $1.80 3
Demonstrations of the shot put, discus throw, hammer throw and javelin. Slow motion photography and repetition are used. The general poise of the body, the method of using the arm, and the leg action are clearly demonstrated for all throws. Two styles of form are given for the javlin throw and the discus sequence. (Sr. High and College)

WEST INDIES (EBF)

10 minutes—sound $1.80 3
Portrays the principal West Indies Islands. Shows strategic importance to the Western Hemisphere trade, economy, etc. Character of tropic islands. Recent modern trends are indicated. (Jr. High through Adult)

Unit Value

WEST VIRGINIA AND ITS NATURAL RESOURCES (BM)

22 minutes—sound—color $1.20 2

West Virginia is a land of forested hills and fiery steel furnaces, scenic gorges and giant power plants, farms and busy cities, orchards and coal mines, beef cattle and gas and oil wells, parks and glass factories—all of which is vividly brought out in this motion picture. (Elementary through Adult)

WESTERN EUROPE: AN INTRODUCTION (CORONET)

10 minutes—color—sound $3.60 6

An introduction to the basic geographic concepts of eleven countries in Western Europe, this film vividly presents the complexity of various countries and peoples; the dense population; the careful and varied uses of the land in relationship to the climate; the importance of manufacture and trade and also the close link between the history and geography of Europe to the Western world. (*Intermediate,* Junior High, Senior High)

WESTERN EUROPE—Factories, Mines and Waterways (UWF)

20 minutes—sound $3.00 5

Heavy industry tends to develop in areas which have easy access to sources of raw materials, labor supply and markets. Alsace-Lorrane is one of the most highly industrialized regions in the world. Abundant coal deposits and nearby iron mines are linked by railroads and waterways with manufacturing cities and seaports. This film accompanies the captain of a coal barge on his trip from Strasbourg to Pont-a-Mousson, on the Rhine Marne Canal. Not only does the student gain an insight into the daily life of a barge family aboard their water-borne home, but the film shows clearly why this part of Western Europe has become the industrial heart of the continent. The railroads which run alongside the canals, loading and unloading activities at inland ports, the concentration of industrial sites, and sequences on iron mining, steel making and pottery manufacturing all illustrate the basic geographic concept of this film. (Elementary through Adult)

WESTERN GERMANY: THE LAND AND THE PEOPLE (CORONET)

10 minutes—color—sound $3.60 6

We see the industrial, agricultural and commercial life of Western Germany in relationship to the dense population, natural resources and relatively infertile soil of this area. The importance of coal, farming, trade and synthetic products to the development of this country is vividly shown against the background of its present-day economy. (*Intermediate,* Junior High, Senior High)

WESTERN FRONT (OWI)

21 minutes—sound $1.20 2

A picture of China's plight and heroic fight. The desperate needs of the Chinese people are stressed, as well as the advisability of America's holding the Chinese as friends. (Jr. High through Adult)

WESTWARD MOVEMENT (EBF)

11 minutes—sound $1.80 3

Presents in dynamic animation on a heroic scale the westward migration of people across the United States from the period of

Unit Value

about 1790 to 1890. By use of animation great masses of data and broad mountain top views of the greatest and most dramatic of all human migrations are presented. (Elementary through Sr. High)

WHAT BIRD IS THAT (CFS)

11 minutes—sound—color $3.60 6

Especially produced for classroom use, this film will stimulate every youngster's interest in birds. There are 21 different birds, including most unusual close-ups of bluejays, Baltimore orioles and redstarts. Natural color. (Primary through Adult)

WHAT IS A CONTRACT (CORONET)

10 minutes—sound $1.80 3

Two youngsters take summer jobs to buy the things they've always wanted, only to find themselves jobless and and debtors in the middle of the summer. But by a contract their problems are happily solved. Through this story, your students will have a splendid opportunity to study the elements of mutual assent, competent parties, legal bargain and consideration in both oral and written contracts. (Sr. High)

WHAT IS A CORPORATION (CORONET)

10 minutes—sound $1.80 3

The three principal forms of business ownership: single proprietorship, partnership, and corporation. In a presentation that everyone will understand, the study of business ownership is introduced . . . the advantages and disadvantages of each type shown. (Jr. and Sr. High)

WHAT IS A MAP (YA)

10 minutes—sound $1.80 3

A small girl writes to her friend and explains what her bedroom looks like. By use of animation and special photographic techniques, the concept of maps is introduced and explained, first in terms of a plan of a living room, then in terms of a map of the neighborhood. (Elementary)

WHAT IS ELECTRICITY? (EBF)

14 minutes—sound $2.40 4

Investigations demonstrated in the film provide a background for considering the nature of electricity. The film presents classical electrostatic experiments. Provides accounts of electromagnetism in the experiments of Oersted and Faraday. Illustrates some of the achievements of our civilization by showing industrial applications such as motors and generators. Explains through diagrams the organization of atoms. (Jr. and Sr. High School) (Physics)

WHAT IS A GOOD OBSERVER? (Ind. U.)

27 minutes—sound $4.80 8

Considers the differences between a good and a bad observer and relates this to talking sense. Shows how observation is generally made in terms of similarities. Stresses that ability to see differences is also important. Shows that the good observer bases his conclusion on all of his observations while the poor observer only reaches limited conclusions based on his observations. Argues that our

Unit Value

habits of observing affect the way we talk. Suggests that the consequence of talking based on observation of similarities alone is a limitation of our awareness of the world while talk grounded in observation that also considers differences is a mark of the mature mind. (College and Adult)

WHAT IS FOUR? (YA)

15 minutes—sound $1.80 3
This film is designed for beginning studies in number-work. The relationship, of 4 to 1, 2, 3, 4, 5, is studied from every aspect with the aid of blocks, sticks, etc. (Primary and Lower Elementary)

WHAT IS MONEY? (CORONET)

10 minutes—sound $1.80 3
Following the journey of a five-dollar bill through many transactions, we see how money functions as a standard of value, standard for future payment, storehouse of value, and convenient medium of exchange for goods and services. In addition, we trace the evolution of our monetary systems from the days of primitive barter, and we see how checks serve today as a substitute for money. (Elementary)

WHAT IS SCIENCE? (CORONET)

11 minutes—sound $1.80 3
In a simple story this film illuminates the meaning of the word. It presents the application of the "scientific methods," which embraces the major steps; curiosity, obesrvation, hypothesis, testing of hypothesis and conclusion. The "road to science" is presented as an unending, ever-fascinating trail through the ages. (Jr. and Sr. High)

WHAT IS SOIL? (FILMS, INC.)

10 minutes—sound $1.80 3
Emphasizes that while soil is essential to all living things, they in turn, after their life is done, contribute to the formation of soil. Bobby decided to find out if he can grow beans in soil he makes himself. He finds that he can. While he waits for his beans to grow he learns how soil is really formed over the millions of years and how all living things depend on soil and contribute to its formation. (Primary through Adult)

WHAT IS SOUND? (YA)

10 minutes—sound $1.80 3
This film provides an elementary discussion of the nature, source and transmission of sound waves. (Elementary)

WHAT MAKES A DESERT? (YA)

10 minutes—sound $1.80 3
Explains and illustrates the geographic and climatic factors that create a desert area, with particular reference to the deserts of the southwest United States. Uses a combination of photography and animation to discuss such factors as prevailing wind, mountain barrier, etc. Also points out how desert land can be reclaimed by irrigation. (Elementary)

Unit Value

WHAT MAKES ATOMS STICK TOGETHER? (Ind. U.)

27 minutes—sound $4.80 8
Considers the composition and internal behavior of atoms. Demonstrates the peculiar wave and particle nature of the atoms' components. Discusses what holds atoms together. (College and Adult)

WHAT MAKES DAY AND NIGHT? (YA)

10 minutes—sound $1.80 3
Shows why we have alternation of day and night as well as the reason why the sun can shine only on one-half the earth at a time. (Elementary and Jr. High)

WHAT MAKES RAIN? (YA)

10 minutes—sound $1.80 3
In terms suitable for children of the lower elementary school level, the film introduces and explains the concepts of evaporation and condensation as they apply to the Water Cycle through the device of a letter which the Weather Man writes to a young boy. Animated drawings summarize the Water Cycle. (Elementary)

WHAT TIME IS IT? (CORONET)

10 minutes—sound $1.80 3
As Barbara plans and prepares for her approaching birthday party, she learns to tell time by the clock and by the calendar. The film uses many fascinating participation devices as it teaches how the ability to tell time helps us work together, as well as teaching directly the skills needed to answer the question, "What time is it?" (Primary)

WHAT TO DO ON A DATE (CORONET)

10 minutes—sound $1.80 3
Shows how to plan dates that satisfy both the boy and the girl and the wide range of activities available to high school students who want to make dating an entertaining, enjoyable and constructive social custom. (Jr. High through Adult)

WHEAT FARMER (EBF)

11 minutes—sound $1.80 3
Portrays the life of a wheat farmer and his family in a typical midwestern area. Preparing the soil, and planting winter wheat are shown, along with other farm activities, milking, cooking, and general repair work. 4-H Club activities, labor problems, modern combine harvesting, and home life are delineated. Transportation of the harvested wheat to the town elevator for shipment to the flour mill is treated. Reproduced conversations describe typical farm problems. (Elementary through Sr. High)

WHEN WORK IS DONE (OWI)

9 minutes—sound $1.20 2
Shows how the people of a typical town crowded with war workers provided amusement and recreation for the thousands of people who had come to that community to live and work. (Sr. High through Adult)

Unit Value

WHERE DOES IT GET YOU? (FP)

20 minutes—sound $1.80 3

For teen-agers—this film on alcohol education shows that science proves that alcohol is a drug and not a food, a depressant and not a stimulant, a narcotic poison injurious to the human mind—man's most precious possession. (Sr. High and College)

WHERE'S THE BUNNY? (Ind. U.)

14 minutes—sound $3.00 5

Rusty the Rooster and the kittens are playing a wild game of tag as the film opens. To quiet them, the Friendly Giant reads *Where's the Bunny?* by Ruth Carroll, published by the Oxford University Press. Still full of life, the kittens climb over the giant's shoulders as he reads. At the end of the story, Rusty tags the Friendly Giant "it".

WHICH WAY THIS TIME? (OPA)

10 minutes—sound $1.20 2

Effort to avoid disastrous inflation such as followed World War I. The film points out that serious inflation still threatens the economy of the United States, and asks the public not to pay over-ceiling rents and prices as a contribution toward the defeat of inflation. Animation throughout, but with no element of fantasy or cartoon quality to the animation. (Jr. High through Adult)

WHITNEY, ELI (EBF)

20 minutes—sound $2.40 4

Dramatizes the life story of Eli Whitney, inventor of the cotton gin. Relates incidents which call attention to his dreams and faith in his ideas. Portrays him developing the machine which boomed the economy of the South. Describes Whitney's experiments in designing tools and building machinery for the manufacture of muskets, which became the technical basis for mass production. (Jr. High through Adult)

WHITTIER, JOHN GREENLEAF (EBF)

20 minutes—sound $2.40 4

Recalls highlights in the life of one of America's most beloved poets and strongest abolitionists. Begins by revealing Whittier's boyhood love for poetry. Traces his later association with William Lloyd Garrison, and follows his work as student and editor, when he began to establish himself as a writer and as an advocate of social reforms. Points out Whittier's years of seclusion at Amesbury, and reveals how, during his declining years, he was inspired by boyhood memories to write some of his best-loved poems. (Jr. High through Adult)

WHO MAKES WORDS? (CORONET)

10 minutes—sound $1.80 3

In this film story, your class will seek a new word to describe the pastel-colored "blackboard" which has just arrived. In their quest for this new word they're led to investigate the source of other words and to discover that some are "borrowed," some are simply "invented," still others come about through changes in spelling or meaning. Through their search they learn the important means by which our language grows. (Elementary)

Unit Value

WHY ARE ATOMS UNPREDICTABLE? (Ind. U.)

27 minutes—sound $4.80 8

Discusses man's age-old belief that the future is predictable, like the stars. Stresses that modern study of atoms reveals their behavior to be as puzzling as human behavior. Maintains that atomic research points to at least this much reason for optimism: "The future is uncertain."

WHY DO PEOPLE MISUNDERSTAND EACH OTHER? (Ind. U.)

27 minutes—sound $4.80 8

Analyzes how words may lead to misunderstanding when people talk with each other. Demonstrates that the meaning of words is not fixed and that in themselves words contain no meaning. Yet, listeners often worry more about what words mean than what speakers mean. Misunderstanding . . . tension . . . conflict . . . . . are consequences of listeners concentrating on words and interpreting them in their own way. Suggests that effective communication takes a willing listener and a speaker eager to make himself understood. (College and Adult)

WHY OF AUTOMOBILE LUBRICATION (BM)

24 minutes—sound—color $1.20 2

With the aid of close-up shots of automobile moving parts and clever animation, the film presents a rather technical subject in terms that the average citizen can understand. It shows how tightly the engine, transmission, differential and chassis of a modern automobile are put together, and describes the double service required of engine oil. (Jr. High through Adult)

WHY PUNCTUATE? (YA)

10 minutes—sound $1.80 3

An orientation film designed to motivate and introduce (or review) the study of punctuation. Stresses the importance of good punctuation in our everyday business and social life, and summarizes the basic rules for use of the most important punctuation marks. (Elementary through College)

WHY STUDY FOREIGN LANGUAGES? (CORONET)

10 minutes—sound $1.80 3

Don Baker can't see any use in studying foreign languages . . . until his brother Dick returns from a trip to Europe and convinces him that he is wrong. As this film unfolds, it demonstrates how knowledge of foreign languages contributes to enjoyment of travel, success of commerce and harmonious international relations . . . shows that this knowledge is necessary to the full appreciation of many great literary works . . . gives your students a new concept of the importance of foreign languages to themselves. (Jr. and Sr. High)

WHY STUDY LATIN (CORONET)

10 minutes—sound $1.80 3

The camera visits a high school Latin class where the teacher and several of the students explain why studying Latin is important to them. The values of Latin to an understanding of history, and appreciation of literature and a mastering of English, plus the prac-

Unit Value

tical usefulness of Latin to many professions are interestingly presented. (Jr. and Sr. High)

WHY WE RESPECT THE LAW (CORONET)

14 minutes—sound $2.40 4

As one of the cornerstones of our democracy, law must work. And if law is to work there must be respect for law. Therefore this film strikes at the heart of teaching *democracy.* Its main theme is the development of an attitude of respect for all law—big and little; a habit of obedience without compulsion. Dramatic highlights in this film teach the *social* need and the *individual* need for respect for law. (Jr. and Sr. High)

WILDLIFE AND THE HUMAN TOUCH (USDA)

19 minutes—sound—color $1.20 2

The National Forests are one of the largest and most important wildlife producing areas in the country still available to the public for recreational use, including hunting and fishing. Many people do not fully appreciate the extent and complexity of habitat management on the National Forests, and the benefits derived therefrom. This picture shows characteristic forest animals in their natural habitat—and what the Forest Service is doing to improve the habitat, and at the same time manage these forests for the best interests of all users. (Elementary through Adult)

WILSON DAM SCHOOL (TVA)

20 minutes—sound $1.20 2

Produced in collaboration with the Alabama State Department of Education to demonstrate the operation of a progressive school. (Jr. High through Adult)

WIND FROM THE WEST (FON)

18 minutes—sound $1.80 3

Young Nils dozes in school and dreams of the mountains of Lapland, the yearly migration of reindeer, and of how one day he will become a reindeer herdsman. He sees the various animals and flowers that appear in the spring. (Elementary and Jr. High)

WINDS & THEIR CAUSES (CORONET)

10 minutes—sound $1.80 3

Pete's model airplane crashes. He is determined to find out why; so, with Pete, we discover the facts behind thermals, cumulus clouds and thunderstorms. Then the great winds of the earth are explained . . . on and off shore breezes . . . the easterlies and westerlies. An introduction to the subject of winds and their causes. (Jr. and Sr. High)

WINGED SCOURGE (OIAA)

10 minutes—sound—color $1.20 2

Shows the development of the Anopheles mosquito from the larva to full growth. At this point the film becomes one of general mosqutio control with Walt Disney and his staff. The seven Dwarfs play an important part in the demonstration of the various methods of mosquito control. Good for malaria control. (Elementary through Adult)

Unit Value

WINGS OVER BRAZIL (OIAA)

15 minutes—sound $1.20 2
"Brazil has a predestination for aviation," wrote one historian. Here is a film that bears out the statement. A picturization of progress made by Brazil, especially during World War II, in the modern, advanced field of aviation. An illuminating and thought-provoking document. (Elementary through Adult)

WINTER CARNIVAL (NFB)

11 minutes—sound—color $1.20 2
Breath-taking thrills on the ski trail, spectacular ice carnivals, sleigh rides and dog derbies are a few of the highlights of a Canadian winter holiday. As a background to the outdoor sports we see the brilliant white landscape of Winter Canada. (Jr. High through Adult)

WINTER ON THE FARM (EFB)

10 minutes—sound—color $3.60 6
This delightful color film—one of the Seasons Series—portrays the adaptation of plants and animals to the winter's cold. We follow Joan and Jerry as they observe animal tracks in the snow, the animals which made the tracks, birds at their feeding station, and farm animals in the barn. Especially enjoyable is the children's trip to the woods to cut a Christmas tree. (Primary and Elementary)

WINTER WONDERLAND (C)

12 minutes—sound $1.20 2
Illustrates the varied winter sports that may be enjoyed on the National Forests, such as sking, snowshoeing, tobogganing, skating. Shows some of the facilities, such as ski-jumps, toboggan slides, practice slopes, and shelters that have been provided. (Primary through Jr. High)

WISE LAND USE PAYS (USDA)

18 minutes—sound $1.20 2
Shows many ways for conserving and improving land. (Sr. High)

WONDER OF CHEMISTRY (YA)

10 minutes—sound $1.80 3
Introduces the student to chemistry as one of the sciences. Defines and explains *element, compound* and *chemical change*. Stresses the contributions that chemistry has made to a better ways of life. (Elementary and Jr. High)

WONDERS IN YOUR OWN BACKYARD (C-W)

10 minutes—sound—color $3.00 5
Simplicity of presentation, both on the screen and in the narration, is the outstanding virtue of this excellent film. Two small children look at creatures common to most backyards, and an examination of their peculiarties makes a provocative introduction to further zoological study. (Primary through Adult)

WOODEN FACES OF TOTONICAPAN (OIAA)

9 minutes—sound—color $1.20 2
Guatemalan fiestas, including the breath-taking climax of

Unit Value

Chichicastenango's famous eight-day celebration. (Jr. High through Adult)

WOODWIND CHOIR (EBF)

11 minutes—sound $1.80 3

Begins with the third movement in Brahms' First Symphony and ends with the Scherzo from Mendelssohn's "Midsummer Night's Dream." The body of the film is taken up by demonstrations of the individual tone quality of the various instruments and gives pupils opportunity for studying playing techniques. Excerpts from Rossini's "William Tell" overture, von Weber's "Der Frefschutz." Beethoven's Third Symphony, Schumann's piano concerto, and the Second Movement of Brahms' Fourth Symphony. (Elementary through Adult)

WOODWINDS AND BRASS (EBF)

11 minutes—sound $1.80 3

Eugene Kash introduces the woodwind and brass instruments and has musicians play each of the main types. Beginning with a willow whistle, he explains that modern winds instruments—flute, clarinet, trombone and others—are just more complex versions of this simple pipe. Mr. Kash has the musicians play the instruments separately before playing together. (Primary and Elementary) (Music)

WOODWORKING (EBF)

11 minutes—sound $1.80 3

Describes the importance of woodworking and suggests its values as a hobby as Ray proudly shows his workshop to two of his friends who are enrolling in a beginning woodworking class. Illustrates basic woodworking tools and shows how they are used. Shows the step-by-step construction of a beginning project. (High School and Adult) (Arts and Crafts)

WOOL (From Sheep to Clothing) (EBF)

10 minutes—sound $1.80 3

Tells the complete story of wool—from sheep on a Wyoming range through the knitting of the worsted yarn into sweaters. Shows the sheep being herded and driven to the ranch, and describes each step in the shearing process. Portrays how wool is compressed into bales and then shipped to a mill where it is washed, carded, spun and finally knitted into sweaters. (Primary and Elementary)

WORK OF RIVERS (EBF)

10 minutes—sound $1.80 3

Presents dramatically, yet simply, the erosion cycle of water on the earth's surface. The main story is introduced with a brief portrayal of the water cycle in nature. The main story is integrated by motion pictures, specially taken for this picture, presenting examples from many parts of the country. Models and animated drawings are employed to explain such special features as Niagara Falls, deltas, meanders, ox-bow lakes, rejuvenated rivers, lakes, water gaps, and sand bars. (Jr. High through College)

Unit Value

WORK OF THE ATMOSPHERE (EBF)

10 minutes—sound $1.80 3

Shows the effect of the mechanical and chemical actions of the atmosphere on the earth's surface. Animation depicts the cutting process of windblown sand grains on granite, areas affected by dust storms, and the formation of soils. Magnified views reveal the structure of sand grains and feldspar. Other photographs provide examples of spalling, exfoliation, sand blasting, dunes, loess banks, and volcanic dust. The importance of the atmosphere to plant and animal life is shown. (Jr. High through College)

WORK OF THE KIDNEYS (EBF)

10 minutes—sound $1.80 3

Cinematic devices are used to present a detailed exposition of the kidneys and their functions. First, an analogy is drawn between machines which use selective devices and the selective process by which wastes are eliminated in the kidneys. An animated diagram is used to give an enlarged view of the kidneys, and to reveal the processes of transfer and filtration. Laboratory experiments show the properties of the semi-permeable membranes which function in the kidneys to allow wastes to pass but restrict passage of food materials. Content analysis charts compare glomerular fluid to urine. Anesthetized animals are used to study the factors affecting rate of unrine formation, including blood sugar content and external temperature. The function of the kidneys is compared to that of a gyroscope in that they maintain a balance between the blood and body tissue. (Sr. High)

WORK OF THE STOCK EXCHANGE (CORONET)

16 minutes—sound $1.80 3

This film takes students through each step of incorporation and listing of stock. Outstanding in the film are the details of buying and selling operations on the exchange floor and in the broker's office. Students see how these operations bring to land, labor and management the capital necessary for production. (Jr. and Sr. High)

WORLD AT WAR, THE (OWI)

45 minutes—sound $1.80 3

Pictures graphically and dramatically the history of a world at war—from the invasion of Manchuria on September 18, 1931, to the bombing of Pearl Harbor ten years later. This film is a powerful record of the events, foreshadowing Pearl Harbor and is a historical document of the years 1931-41. (Jr. High through Adult)

WORLD OF PLENTY (BIS)

45 minutes—sound $1.20 2

The story of man and food—past, present and future—is told by two men, a commentator and a heckler. The many facts of the problems—a secure, adequate and suitable supply of food for every man—are challengingly presented through the creative use of animated diagrams, pertinent pictorial material, trick optical effects, and recorded declarations of world citizens and scientists. (Jr. High through Adult)

Unit Value

WORLD SERIES—1948 (S)

40 minutes—sound $1.20 2
Highlights of the World Series between the Cleveland Indians and the Boston Braves. (Elementary through Adult)

WORLD SERIES—1949 (S)

40 minutes—sound $1.20 2
Shows high spots of the World Series games between the New York Yankees and the Brooklyn Dodgers. (Elementary through Adult)

WORLD SERIES—1950 (S)

40 minutes—sound $1.20 2
Highlights of the games between the New York Yankees and Philadelphia Phillies. (Elementary through Adult)

WORLD SERIES—1951 (S)

45 minutes—sound $1.20 2
Highlights of the World Series including Tomson's famous home-run in the play-off series. (Elementary through Adult)

WORLD SERIES—1952 (S)

35 minutes—sound $1.20 2
Hightlights of the World Series games between the New York Yankees and the Brooklyn Dodgers. (Elementary through Adult)

WORLD SERIES—1954 (S)

45 minutes—sound $1.40 2
Highlights of the World Series game between the New York Giants and the Cleveland Indians. (Elementary through Adult)

WORLD SERIES—1955 (S)

45 minutes—sound $1.20 2
Highlights of the World Series games between the Brooklyn Dodgers and the New York Yankees (Elementary through Adult)

WORLD WE WANT TO LIVE IN (NCCJ)

10 minutes—sound $1.20 2
A Roman Catholic, a Protestant, and a Jewish child play together on an American shore but across the ocean not only religious but political rights are denied to minority groups. Indicates also some of the intolerances which have developed on this side of the ocean. (Jr. High through Adult)

WRITING BETTER BUSINESS LETTERS (CORONET)

10 minutes—sound $1.80 3
In an entertaining presentation, this film emphasizes the three principal characteristics of a good business letter: clarity, brevity and courtesy. Primarily designed for use in general English, it will also be of tremendous value in Business English classes. (Jr. and Sr. High)

WRITING THROUGH THE AGES (EBF)

10 minutes—sound $1.80 3
A chronological history of writing as a means of communica-

Unit Value

tion. Shows ways in which writing evolved from pictures and signs and illustrates that local materials used as writing tools influenced the methods of sign making and writing. Depicts and analyzes significant features of early Chinese, Mesopotanian, Egyptian writings. Stresses contributions of Phoenicians, Greeks, and Romans to our present alphabet. (Elementary and Jr. High)

WYOMING AND ITS NATURAL RESOURCES (BM)

25 minutes—sound—color $1.20 2

A comprehensive picture of Wyoming's great mineral and agricultural resources, as well as its scenic beauty. (Jr. High through Adult)

YOU AND YOUR MONEY (FEDERAL RESERVE BANK)

12½ minutes—sound $1.20 2

Tracing the travels of your money—Bill Greenstuff—the film shows in cartoon story form what makes the wheels go around in our nation's business. This is an easy-to-follow lesson in everyday economics, of interest to everyone concerned with the soundness of the American dollar. (Junior, Senior High through Adult)

YOU AND YOUR PARENTS (CORONET)

13 minutes—sound $2.40 4

The issue of parental authority is one that touches every home where there are growing children. The process of "growing away" from the family is described as a natural and normal one, but audiences see how it can lead to difficulties if both parents and children do not take the time to understand each other's problems. (Jr. and Sr. High)

YOU AND YOUR WORK (CORONET)

10 minutes—sound $1.80 3

Being satisfied and happy in one's work . . . right attitude and approach to a job . . . achieving personal adjustment . . . these are basic problems which the vocational guidance worker must help others solve. Here is an invaluable aid in doing this job effectively. (Jr. High through Adult)

YOU ARE THE SWITCHMAN (AM. CANCER)

11 minutes—sound $1.20 2

The story set forth is the tragic end result of delay and ignorance it the treatment of cancer. The last half of the film portrays the splendid results that can be obtained through early treatment. Other factors emphasized are the hope of cure, the three modes of treatment and the danger signals. (Sr. High through Adult)

YOU'LL TAKE THE HIGHROAD (NFB)

18 minutes—sound—color $1.20 2

Follows the modern motor-roads of Jasper National Park to points of interest: the valley of crooked trees, the foot of Athabasca glacier, the favorite haunts of game, etc. Protected by law, the wild life of the region has remained and is constantly in view. The ponderous moose feeding among the lily pads is little disturbed by the holiday group resting by the road side. The shy deer crosses the clearing without haste, and above on the mountain slopes roam the mountain sheep. Most impressive of

Unit Value

all to be seen, as the film follows the park highways, is the Athabasca glacier. Visitors are seen alighting from their car to approach the base of the ice river. Beyond rise the Bow Summit, Mt. Eisenhower, Mt. Rundle and the lesser peaks. (Elementary through Adult)

YOUNG URUGUAY (OIAA)

19 minutes—sound $1.20 2

How the young people of Uruguay live and play and go to school. Uruguay already has the highest degree of literacy in South America, and through this film we come to appreciate the progressive steps now being made in education in this smallest South American republic. (Elementary through Adult)

YOUR CHILDREN'S SLEEP (EBF)

20 minutes—sound $2.40 4

Gives adults a conception of some typical problems in a child's mind, and shows how these problems, although insignificant to an adult, may be important and even frightening to the child. They can cause sleeplessness, or even nightmares. The film stresses the importance of sound, healthy sleep, and shows how it can be insured for children. (Sr. High through Adult)

YOUR FRIEND, THE DOCTOR (CORONET)

10 minutes—sound $1.80 3

For the healthy growth of the individual, primary grade youngsters should have certain medical attention and care. This film helps children understand some of the functions of the doctor in their lives and motivates them to "be friends" with their doctor. Through the experiences of a boy, young audiences will understand just what the doctor does and why it is important to cooperate with him. (Primary)

YOUR FRIEND THE FOREST (EBF)

7 minutes—sound—color $1.80 3

A little boy finds out the value of forests and the need for preventing forest fires. Partly in animation and partly live photography. (Primary and Elementary)

YOUR FRIEND THE SOIL (EBF)

7 minutes—sound—color $1.80 3

A little girl learns of the conditions that effect our food resources and comes to realize that our life and health depend on good farms, good soil, and good food. Partly in animation and partly live photography. (Primary and Elementary)

YOUR FRIEND THE WATER (EBF)

6 minutes—sound—color $1.80 3

The sources and value of pure water are shown in striking contrast to the causes and wastefulness of water pollution; both clean and dirty water are presented in terms that young children will appreciate.

YOUR PERMIT TO DRIVE (GM)

11 minutes—sound $1.20 2

The film opens with examples of the magnitude of highway

Unit Value

transportation and its contributions to social and economic progress. It then stresses that possession of a driver's license is both a privilege and an obligation. Citing the toll of traffic accidents, the film urges drivers to regard the signing of a license as a pledge to drive in a courteous, sportsmanlike manner. The film closes by pointing out that the new driver has an opportunity to learn the right way to drive and urging him to guard what a license stands for. (Sr. High through Adult)

YOUR THRIFT HABITS (CORONET)

10 minutes—sound $1.80 3

Your students will realize that by setting up a budget for systematic savings, by careful buying, doing without extravagances and choosing between immediate and future satisfactions, they will attain many material goals in life. (Jr. and Sr. High)

YOUR TOWN—A STORY OF AMERICA (NAM)

10 minutes—sound $1.20 2

As Jerry passed the local Mason factory, a crowd was gathered outside. He stopped to see "the fun." Someone on a soapbox was shouting "down with this—and down with that" and then a stone is thrown through the factory window. A policeman and friend of the boy's grandfather, took him home. Grandfather, after discovering his grandson to be participating in a protest against the factory, relates the history of the factory, and tries to show how the income of the plant has made possible much of the life that today exists in the community. Jerry learned some American fundamentals. (Elementary through Adult)

YOUR VOICE (EBF)

10 minutes—sound $1.80 3

Describes the four phases of voice production: respiration, phonation, resonance, and articulation. Presents actual photography of the vocal folds in operation. Animated drawings, together with considerable demonstration material, clearly explain the various processes. The film emphasizes the role of proper exercises for improving the voice; and the use of the voice in speaking and singing is illustrated. (Jr. and Sr. High)

YOURS TRULY, ED GRAHAM (AM. LIFE INS.)

25 minutes—sound $1.20 2

Produced by Roland Reed Productions this picture tells the story of typical people in a small town—their joys and sorrows and their search for family security. Shows the role of the life insurance agent in a community. (Sr. High through Adult)

YUCATAN (OIAA)

20 minutes—sound—color $1.20 2

An exciting and colorful travelogue to Mexico's eastern province, Yucatan. Superb musical background, and with glorious color photography, this film provides an experience never to be forgotten. (Jr. High through Adult)

ZINC—MINING, MILLING AND SMELTING (BM)

25 minutes—sound $1.20 2

Shows the location of zinc-bearing ores in the U. S., method of

Unit Value

mining the ore, and the processes of the crushing, screening, chemical separation and flotation, roasting and electric smelting. Closing scenes show some industrial uses of zinc. (Jr. High through Adult)

ZION NATIONAL PARK (FORD)

10 minutes—sound $1.20 2

Monoliths carved by rains and river, basking in semi-tropical climate, makes this park in southwestern Utah an ideal vactaion ground. Aerial views of the park combined with the natural beauty of the rock formations make this picture very interesting. (Elementary through Adult)

ZOO (EBF)

10 minutes—sound—color $3.60 6

A gay, colorful visit to one of the world's largest, most modern zoos, where animals are observed in areas simulating their natural habitats. Includes intimate and fascinating studies of polar and kodiak bears, lions, tigers, kangaroos, alpacas, giraffes, zebras, baboons, sea lions, hippopotamuses and elephants. Excellent natural color and close-up photography contribute much to realism and authenticity. (Primary and Elementary)

ZOO BABIES (CORONET)

10 minutes—color—sound $3.60 6

Do all baby animals look like their parents? How do they get their food? How are they protected? These questions and others about the growth of young animals are answered in this lively presentation of zoo animals and their offspring. Children's attention is directed to the physical characteristics and habits of baby monkeys, gnus, kudus, lions, peacocks, alligators and bears, and the relationship of the babies to their parents. (*Primary*)

FILMS DEPOSITED BY NORTH CAROLINA EDUCATION ASSOCIATION

The following films have been deposited with the Bureau of Audio-Visual Education, by the North Carolina Education Association, for distribution. A service charge of $1.00 plus return postage is made to cover postage, insurance and inspection.

DESK FOR BILLIE, A (NEA)

57 minutes $1.00

Shows how America's schools open their doors to all children, regardless of wealth or poverty. This effective public relations film can be shown to the public as a background for panel discussions or valuable commentary about the school system in any community.

FIGHT FOR BETTER SCHOOLS (MOT)

20 minutes—sound $1.00

The story of how the aroused citizens of Arlington County, Virginia raised their schools from the nation's poorest to a level that Dr. William A. Early, superintendent, calls "an educator's dream." The people of Arlington planned and worked to improve their schools. They expanded facilities by providing additional equipment. The film shows what every town can do when it becomes interested in its school problem.

FREEDOM TO LEARN (NEA)

27 minutes—sound—color $1.00

This film shows that modern schools prepare our children to assume their responsibilities as good citizens. It explains that respect for facts, constant search for the truth, and knowledge of the world as it actually is are essential in this preparation.

MIKE MAKES HIS MARK (NCEA)

29 minutes—sound—color $1.00

This motion picture shows what a school can do in helping to prevent juvenile delinquency. It is the story of a boy and his future.

NOT BY CHANCE (NEA)

28 minutes—sound $1.00

In a good program of undergraduate teacher education we see a prospective teacher acquiring the knowledge, the understanding of children, and the special skills that will make her a good beginning teacher. Through her program, the audience is introduced to many of the important current practices in teacher education in such areas as admissions, classroom instruction, campus life, guidance activities, observation, and directed student teaching.

NO TEACHER ALONE (NEA)

20 minutes—sound $1.00

Cleo Thomas, a competent instructor and a member of her local and state teachers associations, derides a long-time friend who is about to enroll a new teacher in the National Education Association of the United States. Cleo's original attitude of scorn gradually changes to one of thoughtful consideration as she sees what is being done and begins to sense her relationship to it all.

SECTION 16 (NCEA)

13½ minutes—sound $1.00

The nation's long and often disappointing quest for satisfactory

schools is traced with bold strokes in the historic film, *Section 16.* Authentic settings and costumes recapture the spirit of colonial America and of the periods of pioneering and expansion through which we have passed. Out of this background today's major problems in education are brought into focus, especially the current shortages of classrooms and teachers. Solution of these problems in the traditional American way, through citizen interest, concern, and intelligent action, is identified as the unfinished business of this generation.

SECURE THE BLESSINGS (NCEA)

30 minutes—sound $1.00

Dramatizes the role of the public school in a democracy. Five main characters, a farmer, businessman, labor leader, housewife and Congressman are faced with everyday problems. How they solve these problems is to a great extent, determined by the kind of education they have received in our public schools. The film points out that one of the best places to learn to respect the rights and understand the problems of others is in a public school. Recommended for PTA Groups.

SIXTH CHAIR (NCEA)

20 minutes—sound $1.00

A dramatic portrayal of the dangers of the public's complacency toward education, The Sixth Chair stresses the need for building construction and modernization, more teachers, and plenty of up-to-date education tools. A successor to *Pop Rings The Bell,* this film is excellent for PTA and community groups.

SKIPPY AND THE THREE R'S (NCEA)

29 minutes—sound $1.00

This is a film that every teacher will want to show to the parents of the children in her classroom. It is a detailed and accurate account of how children learn the 3 R's. But more important, it shows that children learn the basic tools naturally and easily. It shows that the 3 R's are tools to help children understand and work and live "satisfyingly" in the world about them.

TEACHER, THE (EBF)

16 minutes—sound $1.00

Tells the story of Julia Whittaker, a teacher who is offered another interesting job but who decides to remain in her chosen profession. Dramatically emphasizes the important work of a teacher in training future citizens. Describes the training teachers receive and suggests some of the satisfactions they get from their work. Although created especially for use in the early school grades, because of its dramatic content, this film is excellent for teacher training and recruitment.

TEACHERS FOR NORTH CAROLINA (NCEA)

13 minutes—color—sound $1.00

Presented here is the N. C. teaching situation, the teacher supply and demand, pupil increases, and the underlying causes of such a situation—primarily the lack of adequate salaries.

WHAT GREATER GIFT (NCEA)

28 minutes—sound $1.00

A motion picture dramatizing the teacher as a professional per-

son. It is no longer true nor was it ever in fact, that "just anybody can teach school." Today's teachers needs professional preparation to acquire the understandings and skills essential to good teaching. To dramatize the teacher as a professional person and show something of what teaching is all about is the purpose of this new motion picture.

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The Bureau of Audio-Visual Education
for information on
Magnetic Tapes for Teaching

FILMS WITHDRAWN FROM CIRCULATION SINCE CATALOG WAS PRINTED

Air All Around Us
Baby Sitter
Bandages and Bullets
Basketball Today
Bronco Busters
The Builders
Byways of France
Canadian Cruise
Canoe Country
Chuck Taylor's Fundamentals of Basketball
Constitution of the United States
Family Outing
Famous Fish I Have Met
From Tee to Green
Highland Holiday
In Daily Battle
Italy (MOT)
Look Who's Driving
Mexican Agricultural Story
Microscopic Mysteries
Millions of Cats
Modern Baseball
North to Hudson Bay
The Red Carpet
Road to Gaspe
Rocky Mountain Trout
Rubber Lends a Hand
Sailing In Canada
Silks and Sulkies
Ski Holiday
Some Friendly Birds
Something You Didn't Eat
Story of Agriculture
Story of Nickel Refining
Thomas Jefferson and Monticello
Trees For Tomorrow
Understanding Vitamins
West Virginia and Its Natural Resources
Winter Carnival
You'll Take The Highroad

SUPPLEMENT

Unit Value

ABEGWEIT (NFBC)

15 minutes—color $1.50 2

Abegweit, meaning "cradled in the waves", is the Indian name for Prince Edward Island. The camera roams over pleasure resorts and cultivated areas at no point far from the sea, which earn for this island the name "Garden of the Gulf". It shifts from one vacation spot to another showing the variety of interests and holiday facilities that await the summer visitor. Elem. thru Adult.

ADVANCE THE BOMBER LINE (McGRAW-HILL)

28 minutes $6.00 8

How American forces took the key islands in the Pacific culminating in the big battle of Saipan—so that our B-29 Superfort bombers could have a base from which to mount aerial attacks on the Japanese mainland. High School thru Adult.

ADVENTURES OF A CHIPMUNK FAMILY (EBF)

11 minutes $2.25 3

The story of a chipmunk family and especially of young babies from early spring to the beginning of winter. The film shows the newborn chipmunk babies and their training period during the early summer. Through use of a special device, it is possible to observe the chipmunk digging his burrow, collecting his store of food, and settling down for the winter rest. Primary, Middle.

AGRICULTURE STORY (USDA)

14 minutes $1.50 2

This film contains a summary of the many fields of work done by the United States Department of Agriculture. It tells how the American agriculture has reached a high point in efficiency and dramatizes the forces of nature, gifts of science and research, and the accomplishment of American farmers and machines operating in a free economy. (color)

THE AIR AROUND US (EBF)

11 minutes $2.25 3

Shows that the air is real, that it has both weight and volume. By animation, the chemical composition of the air is explained. A boy then discovers that the physical and chemical properties of the air are useful to men in many ways. Middle.

AIRPORT (EBF)

11 minutes $2.25 3

Brings to life the fascinating activities at a large, busy commercial airport. Instructions are radioed from the control tower to incoming planes; giant airliners land and take off; passengers purchase tickets; food is prepared in the airport kitchen for each flight; baggage and mail are made ready; and a private pilot charts his trip and submits his flight plan. Primary, Middle.

AIRWAYS OF THE FUTURE (McGRAW-HILL)

12 minutes $2.25 3

Shows the importance of the Air Transport Command in 1942 when war supplies were badly needed in Africa and how a global network of air routes was built. Includes scenes of training and activities of ATC personnel and shots of "obscure" air terminals abroad.

Unit Value

ALASKA: RESERVOIR OF RESOURCES (EBF)

11 minutes $2.25 3

Reviews Alaska's geographical features, locates its three great climatic regions, and indicates the major factors that make Alaska a true "reservoir of resources." Depicts the seven great industries contributing to Alaska's economy—lumbering, fishing, mining, transportation, agriculture, fur-farming, and the tourist trade. Middle, Jr. High, Sr. High.

THE AMAZON (PEOPLE AND RESOURCES OF NORTHERN BRAZIL) (EBF)

22 minutes $3.75 5

Explores the great valley of the Amazon—the swampland and jungle, primitive Indian villages, small farms and market towns, fishing villages, river traffic, and harbor cities. Typical family and village scenes illustrate the various ways in which people along the Amazon gain a living from the river and the jungle. Middle, Jr. High, Sr. High, Adult.

AND GLADLY TEACH (NEA)

28 minutes $1.00

This film dramatically points up the deep satisfactions of teaching—the "lovely magic" when a small face lights with comprehension, or a boy who hates school suddenly finds there's an important spot waiting for him in school band or Kilowatt Club. Shown are the wide range of opportunities in teaching.

ANIMAL HOMES (EBF)

11 minutes $2.25 3

Shows where animals live—in trees, in the ground and in water. Not only are settings and exterior scenes of different homes shown, but views are provided inside such homes as those of the trap-door spider, squirrel, raccoon, skunk, woodchuck and wood mouse. Primary, Middle.

ANIMALS AT WORK IN NATURE (EBF)

11 minutes $2.25 3

Unusual photography of different kinds of animals at work introduces and illustrates the concept that nature has equipped animals with special parts of their bodies which they use as tools to build homes, raise their young, and get and store food. Among the many animals shown in the film are: bees, woodpeckers, crickets, orioles, caterpillars, ants, gophers, and beavers. Primary, Middle.

ANIMALS IN AUTUMN (EBF)

11 minutes $2.25 3

Shows typical autumn activities of a variety of animals—searching for food, building warm homes, preparing to migrate or hibernate during the winter months. Includes large animals like the deer; smaller animals like the fox, rabbit, ground squirrel, raccoon, weasel, and cony; cold-blooded animals, birds, and insects. Primary, Middle.

ANIMALS IN SPRING (EBF)

11 minutes $2.25 3

A delightful spring excursion into the natural environs of bluebirds, ducks, insects, frogs, turtles, foxes, skunks, woodchucks, and others. Primary, Middle.

Unit Value

ANIMALS IN SUMMER (EBF)

11 minutes $2.25 3

Turns the camera upon a dozen or more common animals of the woods during the summer months. From the fish and frog to insects and meat eaters, we see animals seeking food and sheltering their young from their enemies. Primary, Middle.

ANIMALS OF THE INDIAN JUNGLE (EBF)

11 minutes $2.25 3

Explores the dense tropical rain forest of Eastern India, showing vivid closeups of representative animals in their native environment. Shows the pattern of survival in the jungle—the ways of the hunters and the defenses of the hunted. Includes sequences on the tiger, the python, the cobra, the mongoose, the monkey, and the elephant. Middle.

ANTS (EBF)

11 minutes $2.25 3

Depicts the activities of four different types of ants—mound builders, black ants, household ants, and carpenter ants. Shows in detail the life cycle of the carpenter ant, including construction of the nest, laying of eggs, feeding of young, hatching, and preparations for swarming. Middle, Jr. High.

ATMOSPHERIC PRESSURE (EBF)

11 minutes $2.25 3

(With the Magdeburg Experiment) Develops concepts about atmospheric pressure by recreating the problems and discoveries of Von Guericke, Torricelli, and Viviani. Authentically re-enacts the famous Madgeburg Experiment. Shows modern applications of air pressure. Jr. High, Sr. High.

A BALANCED AQUARIUM (EBF)

11 minutes $2.25 3

Susan and Fred follow directions carefully in setting up their home aquarium. Because they allow for the needs and interdependence of various kinds of fish and green plants, the result is a beautiful and absorbing example of the balance in nature. Primary, Middle.

BASIC TECHNIQUE FOR HOME LANDSCAPING (USDA)

11½ minutes—sound—color $1.50 2

Designed as a general interest film for use by garden clubs, in civic groups, schools, youth groups, such as home economics extension clubs, 4-H or FFA, meetings of homeowners, homebuilders or professional nurserymen.

BATTLE OF BRITAIN (McGRAW-HILL)

28 minutes $6.00 8

The story of the gallant defense of the British Isles by RAF fighter pilots in 1941, narrated by Michael Redgrave and featuring portions of recorded speeches by Sir Winston Churchill.

THE BATTLE OF YORKTOWN (EBF)

13 minutes $3.00 4

Describes the events which led to the decisive battle of the American Revolution at Yorktown, and shows the battle itself in detail. The film shows Washington's skill as a leader and his tact in dealing with America's French allies, and indicates the importance of France in contributing to American victory. Middle, Jr. High, Sr. High.

Unit Value

BEAUTIFUL BONNE BAY (NFBC)

14 minutes—color $1.50 2

This film offers an enticing invitation to the good sport and restful atmosphere of Bonne Bay on the Western shore of Newfoundland. It opens with picturesque scenes of harbor activities, with fishing ships of every nation ranged side by side. Views of the harbor merge into the more pastoral scenes of the shore and the profusion of flowers which spread their colors over the countryside. Accessible both by water and by branch roads of the Trans-Canada Highway, Bonne Bay deserves a place on everyone's Newfoundland itinerary. Elem. thru Adult.

BIG ANIMALS OF AFRICA (EBF)

10 minutes $2.25 3

Pictures many of the larger animals of Africa, explaining how they live together. Shows interesting examples of protective coloring. Included are the zebra, giraffe, wildebeest, lion, elephant, rhinoceros, hippopotamus, ostrich, flamingo, and many others. Primary, Middle.

BIG LAND ANIMALS OF NORTH AMERICA

11 minutes $2.25 3

Identifies several large wild animals such as the moose, elk, bison, bear, and deer and calls attention to their distinguishing characteristics. Describes their relationships to each other and to their environment. Primary, Middle.

BIG WHITE WATER (NFBC)

9 minutes—color $1.50 2

One of the most photogenic rivers in Canada is the Manouane, a tributary of the Peribonca River which flows into Lake St. John in the wilderness of northern Quebec. Cameras explore the scenic turbulence of the river and join a group of fishermen who navigate it in canoes, racing through churning rapids and slanting falls—a perilous venture were it not for the Indian guides. Elem. thru Adult.

BIOGRAPHY OF THE UNBORN (EBF)

17 minutes $3.00 4

Traces the creation of life from the moment of fertilization to the moment when the infant begins independent life. In photomicrography, animation, live photography, and X-rays the film records the development of the embryo and the fetus in the mother's womb. Sr. High, College, Adult.

BIRD HOMES (EBF)

11 minutes $2.25 3

Offers a fascinating look at different kinds of bird homes, the habitats in which they can be found, and the types of materials used in nest building. We see that the basic plan for a nest is a cup-shaped hollow or structure and that it may be as simple as a small depression scratched in the ground, or as neat as the structure of fine materials built by the warbler. Primary, Middle.

THE CHALLENGE OF THE GIFTED (McGRAW-HILL)

11 minutes $2.25 3

Shows what one school district (Vallejo, California) is doing about the problems of the exceptional child.

Unit Value

EIGHT STEPS TO PEACE—NO. 7—CHARTER REVIEW (PIERCE BUTLER, JR. FOUNDATION)

13½ minutes $1.50 2

The whole question of Charter Review is ably explained by Vincent Price as he answers this perplexing and pressing question.

CHILDREN IN AUTUMN (EBF)

11 minutes $2.25 3

Jerry is working on a collection of signs of autumn with the help of his sister. They observe the gradual change from the luxuriant green of the summer to the brown and red color of autumn. They also observe changes in the animal world. The days grow shorter and the weather becomes cooler—all of which influence life around them. By November, Jerry has a rich collection of signs of autumn. Primary.

CHILDREN IN SPRING (EBF)

11 minutes $2.25 3

Two children observe the signs of spring through a series of personal experiences. On a picnic in the woods, they enjoy the blossoming trees and wild flowers; find tadpoles in a stream and baby birds in a robin's nest. Later, with their mother's help, they start a vegetable garden from seeds and young plants, and set out a row of flowers. Primary.

CHILDREN IN SUMMER

11 minutes $2.25 3

Two children enjoy summer experiences month by month. They visit the farm and investigate nature in the barnyard, in the fields, and in the pasture. The two children work in their garden and enjoy a dinner outdoors with vegetables from their garden. Primary.

CHILDREN IN WINTER (EBF)

11 minutes $2.25 3

Two children, with their dog, observe the winter season. They play in the snow, investigate nature in their back yard and around the house, check temperature, and observe the waning of the day with the accompanying play of shadows. Some indoor activities are shown. The children's winter experiences are woven into a story which begins on the first day of winter and ends with the first thaw. Primary.

CHILDREN'S PLAY (McGRAW-HILL)

27 minutes $3.75 5

Play is a dynamic factor in a child's development as well as a requirement for good health. This film points up the changing form of children's recreation, portraying play at each age level. The film demonstrates the important contributions parents can and should make to give their children the best possible chance for healthy play. Correlated with Hurlock: Child Development. College, Adult.

CHRISTMAS RHAPSODY (EBF)

11 minutes $2.25 3

The heart-touching story of the littlest Christmas tree . . . as tender and warm as the meaning of Christmas. Photographed in one of America's most beautiful natural settings—near Brighton, Utah. The familiar music and carols of the Yuletide are woven throughout the film by a full symphony orchestra and chorus. Primary, Middle, Jr. High.

Unit Value

CHRISTMAS THROUGH THE AGES (EBF)

14 minutes $3.00 4

The story of Christmas, blended from Biblical history, myths, legends, and customs as old as the human race. Dramatic scenes trace the symbols of Christmas to their many sources and reflect the world-wide participation in a holiday which celebrates goodwill and peace on earth. Primary, Middle, Jr. High.

THE COLD DECADE-AIRLIFT (McGRAW-HILL)

28 minutes $6.00 8

This is the story of the Berlin airlift in 1948-49, the story of a new use for Allied airpower—an unexpected use of military planes upon whose success depended the political future of two and a quarter million people.

THE COLD DECADE-KOREAN STALEMATE (McGRAW-HILL)

28 minutes $6.00 8

A vivid account of the Chinese Communist entrance into the Korean war, the first meeting in battle of American F-86 Sabrejet fighters and Soviet-built MIG 15's, and the ultimate stalemate between the ground armies leading to the politically-charged armistice talk.

THE COLD DECADE-TO THE YALU (McGRAW-HILL)

28 minutes $6.00 8

This grim story of the Soviet-supported invasion of South Korea in 1950 and the explosive political overtones of the East-West cold war, is also the story of the advent of the first American jet fighter, the Lockheed F-80 "Shooting Star."

COMMON FALLACIES ABOUT GROUP DIFFERENCES (McGRAW-HILL)

15 minutes $3.00 1

This film analyzes seven common notions about races, heredity and group differences in the light of known scientific evidence and shows in what way they are all fallacies. By so doing, it firmly establishes such facts as: there is no "French," "Italian," or other race; group differences in behavior are the result of the culture people grow up in, not heredity; the behavior of isolated cases should not be overgeneralized to represent the behavior of a group. College, Adult.

CONCEPT OF FUNCTION (McGRAW-HILL)

16 minutes $3.75 5

A new approach to the concept of function is given here, one which makes the teaching easier for the teacher and the concept clearer for the student. The former ambiguity in the teaching of this concept is eliminated by new and sharper definitions of such expressions as $F(x)$, range, domain and rule. Present confusion between single-valued and multiple-valued functions is completely eliminated by this new method of looking at the concept of function. Teacher Training.

CONTROLLING BEHAVIOR THROUGH REINFORCEMENT (McGRAW-HILL)

16 minutes $3.00 4

This film shows that by reinforcing an organism on different schedules, we can control not only how fast it works at any given

Unit Value

time, but also the way it distributes that work within a given period of time. These results are demonstrated with pigeons under controlled laboratory conditions, and in an elementary classroom where we watch the varying results of putting the children on different reinforcement schedules. (Teacher Training)

CONQUEST OF THE AIR (McGRAW-HILL)

28 minutes $6.00 8

The advent of the American P-51 fighter plane as a successful long-range escort for U. S. Air Force bombers over Germany in 1944 is described, focusing on a series of air battles which broke the back of the Luftwaffe and became the key to the ultimate Allied invasion of Normandy.

COPPER NETWORK, THE (BUREAU OF MINES)

23 minutes—color $1.50 2

This film shows the importance of copper wire and cable to America's economy. It includes brief sequences on the mining, milling, and processing of copper into bars, followed by scenes of wire-making in which the metal is formed into rods, and then drawn into wire, stranded into huge electric cables, or spun into fine wire for electric motors and small appliances.

COUNSELOR'S DAY (McGRAW-HILL)

11 minutes $2.25 3

A dramatization of the typical activities of a student counselor is used to show his participation in the school program. *Counselor's Day* includes a survey of the background and training of a good counselor, and emphasizes the value of varied outside activities to the counselor. College, Adult.

COUNTERBLAST (McGRAW HILL)

28 minutes $6.00 8

The film depicts, with startling reality, the RAF Bomber Command's devastating attack on the port city of Hamburg, breeding ground for Nazi submarines, to defeat the German attempt to starve the British people through unrestricted submarine warfare.

CROWDED OUT (NEA)

29 minutes $1.00

This is the story of what happens to children and teachers when schools are overcrowded. Suddenly, suburbs become cities, or a new plant grows up—then the children pour in, enrollment doubles and classes overflow into the halls, gymnasiums, churches and basements.

CRUSTACEANS (LOBSTERS, BARNACLES, SHRIMP, AND THEIR RELATIVES) (EBF)

14 minutes $3.00 4

Illustrates the structures, functions, and habitats of the most important types of crustaceans, including the fairy shrimp, plankton, barnacles, crabs, lobsters, and crayfish. Concentrating on the crayfish, the film explains processes of foodgathering, reproduction, autotomy, and molting. Discusses the crustaceans' part in maintaining the balance of nature and their economic value to man. Jr. High, Sr. High, College.

THE DANDIES OF CONSTANTIN GUYS (IND)

12 minutes $3.75 5

Actually, this film is devoted almost entirely to Guys' paintings

Unit Value

of women. A better title might be "The Women of Constantin Guys." Baudelaire's analyses of these works provide the film text. Referring to Guys' portrayal of woman, Baudelaire wrote: "She is a deity, a star presiding over all man's conceptions, the mirror of all nature's graces . . ."

THE DAY NORTH AMERICA IS ATTACKED (McGRAW-HILL)

60 minutes $6.00 8

A forceful and realistic depiction of what actually would occur at Continental Air Defense Command Headquarters and other vital installations in the North American defense perimeter on the fateful day of a nuclear attack.

DEFEAT OF JAPAN (McGRAW-HILL)

28 minutes $6.00 8

The moving story of the U. S. Air Force's preparation for the mission which began on the island of Tinian, in the Marianas, and ended in the awesome mushroom cloud over Hiroshima, and the ultimate surrender ceremony aboard the U. S. S. Missouri.

DEVELOPMENT CHARACTERISTICS OF PRE-ADOLESCENTS (McGRAW-HILL)

12 minutes $2.25 3

As the child grows toward maturity, successive stages of development are apparent—each stage has a distinctive pattern of behavior. A study of the daily life of an eight-year-old girl and a nine-year-old boy illustrates the chief development characteristics of pre-adolescents. Their patterns of behavior provide information on developing a curriculum suitable to their needs and educational experiences.

DEVELOPMENT OF INDIVIDUAL DIFFERENCES (McGRAW-HILL)

13 minutes $2.25 3

No two individuals are alike. Differences result from both heredity and environment. This film reviews and illustrates what is known and generally accepted about the relative influence of those two factors. Through a comparison of two brothers, and a study of another family, the three principal ways in which family resemblances in behavior are handed on from generation to generation are demonstrated.

DIAGNOSIS AND PLANNING ADJUSTMENTS IN COUNSELING (McGRAW-HILL)

18 minutes $3.00 4

The counselor's diagnosis and treatment of a maladjusted student's emotional problems are used to show the counselor's role in the overall school program and the steps in successful counseling.

DISCOVERING INDIVIDUAL DIFFERENCES (Mc-GRAW-HILL)

25 minutes $3.75 5

The methods by which a fifth-grade teacher becomes acquainted with the individual needs and characteristics of the children in her class are displayed in dramatized incidents. The film shows how these techniques are successfully applied in five typical cases and how they might be generally used to supplement the teacher's own experience and resourcefulness.

Unit Value

EIGHT STEPS TO PEACE—NO. 2—DOES ARMAMENT MAKE SENSE? (PIERCE-BUTLER FD.)

13½ minutes $1.50 2

An appeal by Raymond Massey to consider the economic and social gains of total disarmament instead of the proposed reduction of armaments.

DON QUIXOTE BY GUSTAVE DORÉ (IND)

12 minutes $3.75 5

This film recreates the story of Don Quixote and Sancho Panza by using the illustrations of Gustave Doré. Although Doré made a great many other series of illustrations, he is probably best known for the works presented here.

DRAUGHTSMAN OF EVERYDAY EVENTS: DANIEL VIERGE (IND)

12 minutes $3.15 5

Presented here are the drawings of Daniel Vierge, newspaper illustrator best remembered as a reporter of a time before photography had come to be at the service of the press. Vierge chronicled events during the period (1870-1904) through personal observations and rude sketches which at that time were sent in by reporters covering stories all over the world.

DRAWINGS BY DEGAS (IND)

12 minutes $3.75 5

This film presents a collection of Degas' drawings from the Louvre, including the last drawings made when the artist was nearly blind. In this context, Degas reveals his attitude about the women he paints. As he explains: "In showing a back, I want to reveal its character, its age, its position in society." Thus, Degas, "painter of the ballerinas," encloses his dancers in a network of lines in a kind of realism that is never vulgar because it is so precise.

DRAWINGS BY FRAGONARD (IND)

12 minutes $3.75 5

All the drawings of Fragonard kept by the Louvre Museum are shown in this film. This presentation of the art of Fragonard attempts to develop a mood within the viewer which parallels the art being presented: The art of transparency where the delicacy of outlines does not exclude a certain force; the idea of creating a life of ease dedicated to leading where nothing would seem to justify a movement, a gesture, except music.

DRY MOUNT YOUR TEACHING PICTURES (McGRAW-HILL)

10 minutes $2.25 3

The use of dry mount tissue and an ordinary iron enables a teacher to mount for classroom use a variety of valuable teaching pictures collected from many sources. This film shows, step-by-step, the simple procedure required for this type of mounting and indicates the number of uses and advantages to the students of still pictures in the classroom.

EACH CHILD IS DIFFERENT (McGRAW-HILL)

17 minutes $3.00 4

Dramatized incidents are used in presenting a study of five fifth-grade children, whose personalities and backgrounds present typical problems. The film explains the importance of the elemen-

Unit Value

tary school teacher's knowledge of the complex and different backgrounds of the children, as well as their individual abilities and needs, in order to adjust the teaching program to meet those needs. Correlated with Schorling and Wingo: *Elementary-School Student Teaching.*

THE EARLY DAYS (McGRAW-HILL)

28 minutes $6.00 8

A humorous backward glance at aviation's horse-and-buggy period and serious evaluation of the emergence of the air plane as a military weapon during World War I, narrated by Capt. Eddie Rickenbacker and CBS News Correspondent Walter Cronkite.

EARTH SATELLITES (EBF)

17 minutes $3.75 5

The film opens with a dramatic animated sequence of the launching of the world's first satellite, the Russian Sputnik I. It points out that this satellite and the American satellites, which soon followed it, were launched through knowledge scientists had gained in many years of study. The film shows the two American satellites, the Explorer and the Vanguard, in the process of construction. We see the instruments which are installed in the satellites and hear about the kind of information which these devices have sent back from outer space. Animated drawings show the structure of the atmosphere and the height which must be attained to put a satellite into orbit. The film shows a two-hour orbit and a twenty-four hour orbit, and compares them with the orbit of the earth's only natural satellite, the moon.

EFFECTIVE LEARNING IN THE ELEMENTARY SCHOOL (McGRAW-HILL)

20 minutes $3.00 4

In the first-person narrative a fifth-grade teacher tells some of her own experiences in making learning more effective. In her class, teacher and pupil work together on such basic skills as reading, writing, arithmetic, social studies and creative arts, but motivation for their work is strengthened through unit study projects which provide opportunities for developing other vital skills such as in working together and sharing information. Correlated with Richey: *Planning for Teaching.*

ELEPHANT BABY (EBF)

14 minutes $3.00 4

The story of a baby elephant from its first day in the jungle, through training to graduation day, when the elephant joins the working force of elephants in a teakwood lumber camp in India. Shown against a realistic background, this film is a scientific, yet charming narrative story about domesticated elephants and people who handle them. Primary.

EL GRECO: THE SECRET OF TOLEDO (IND)

12 minutes $3.75 5

In this commentary on the work of El Greco, the film utilizes the writing of Maurice Barrès to explain the influence of life in Toledo on the style of the artist. In Toledo, El Greco did not forget what he had gained from his Italian studies . . . he remembers, but applies it in quite a different way. It was in Toledo that he abandoned the warm tones of the Italian sun for the pale cold light of the moon.

Value Unit

ENERGY FROM THE SUN (EBF)

11 minutes $3.00 4

Actual photography of the sun's surface, made at the observatory at Climax, Colorado, is a unique contribution to learning about our essential star. Shows how the sun produces radiant energy, how man adapts it to his needs, and points toward the direct use of solar energy in the near future. Middle, Jr. High, Sr. High.

ESCAPE TO THE ROCKIES (NFB)

15 minutes $1.50 2

This film accompanies a young woman from Chicago on a "package tour" of the Canadian Rockies. It shows the magnificent scenery which such a tour includes and stop-overs at such popular holiday resorts as Jasper National Park, Lake Louise, and Banff. Throughout the film the camera lingers over points of special scenic interest. (color)

THE EXACT SMALL THINGS

30 minutes $6.00 8

Professor Peterson stresses the importance of knowing the exact names of the parts of life so that they can be introduced to others who have not known them before. He points out that generalizations should be made convincing by supporting evidence, that is with "exact, small things." He illustrates by making specific in meaning such general words and phrases as *wild flowers*, *birds*, *making noises*, and *some*, considering the connections between the way things are seen and felt and the way they are expressed in writing.

EXPLORER LAUNCHING

10 minutes $1.50 2

Official motion picture production of the launching of first American Satellite at Cape Canaveral, Florida. Released by U. S. Army Publication Office.

MR. FINNEY'S FEELINGS (CONSOLIDATED FILMS)

10 minutes $2.25 3

This film was designed especially to encourage discussion, to stimulate questions and comments, and to provide an exchange of ideas about ways of meeting stress situations and handling day-to-day relationships with people. (color)

FISHING IN NEWFOUNDLAND (NFBC)

22 minutes—color $1.50 2

Fishing amidst the grandeurs of Newfoundland, where sport fishing is at its finest and mettlesome trout only serve to whet the angler's appetite for still bigger trophies. For Lee Wulff, internationally famous sportsman, these materialize in endurance testing bouts with giant blue-finned tuna, broad-billed swordfish and fine samples of Atlantic salmon. Advice is given on best techniques of casting and playing, and some reference is made to fishing regulations.

FOOD FROM OUR GARDEN (EBF)

10 minutes $2.25 3

When the "life cycle" of a garden in a temperate climate has brought the vegetables to maturity, Mary and Philip enjoy the food they have grown. They learn which parts of the plants are edible, and the function of roots, bulbs, tubers, stalks, blossoms, leaves, and seeds. Primary, Middle.

Unit Value

FOOLS, DAREDEVILS, AND GENIUSES (McGRAW-HILL)

28 minutes $6.00 8

A kaleidoscopic look at the roaring 20's-aftermath of World War I—an era when the views of men like Charles Lindbergh and General Billy Mitchell on the future of aviation contrasted sharply with the more popular idea that air power could not be considered seriously.

FROM 1900 UNTIL AFTER WORLD WAR I (IND)

12 minutes $3.75 5

This film shows the first years of 20th century France as seen by Forain. Of his work, Forain says: "To tell the story of everyday life, to show the ridiculousness of certain sufferings, the sadness of many joys . . . such is my intention." All that follows has no other aim but to present a statement about a period of history by one of the most cynical of all French draughtsmen.

FROM SENTENCES TO PARAGRAPHS (IND)

30 minutes $5.00 8

Professor Edwin Peterson discusses the method of developing the "explaining paragraph." This type of paragraph structure begins with a generalization, statement of fact, or topic sentence, which is expanded with evidence. He shows that, like the fan which must be unfolded, the generalization must be expanded with details.

FUNDAMENTAL SKILLS IN A UNIT OF WORK (BAILEY)

20 minutes $3.75 5

Shows how a skillful teacher can arouse the interest of her class and guide them in developing and carrying out a unit of work. In this film, a sixth grade class, having completed a unit of work on ancient civilization, becomes interested in modern means of preserving records of all types. The teacher tells the story of how this unit of work involved learning experiences such as dramatics, rhythms, music, science, arithmetic, and written and oral communication. The use of audio-visual aids is included.

FUNDAMENTALS OF THE NERVOUS SYSTEM (EBF)

16 minutes $3.00 4

Animation and live-action photography trace the fundamentals of the nervous system. Shows the structure of the brain and follows the pathways through the central and the peripheral systems. Several rare experiments are shown in the film. Jr. High, Sr. High.

GAS LAWS AND THEIR APPLICATION (EBF)

13 minutes $3.00 4

Demonstrates some of the early research which led to the discovery of the relationships between the temperature, volume and pressure of gases. Applications of the gas laws are shown in compression, refrigeration, heat engines, and low temperature research. Jr. High, Sr. High.

GOLDFINCH FAMILY (EBF)

8 minutes $2.25 3

With many vivid and unusual close-ups, this film provides a complete view of the family life of goldfinches—their eating habits, their special way of building a nest, and the ways the parent goldfinches work together to feed and care for their young. The day-by-day growth of the young goldfinches is traced from the

Unit Value

time of hatching until they are able to leave the nest and care for themselves. Primary, Middle.

GOOD PLACE TO WORK (NATIONAL ASSOC. OF MFG.)

14 minutes $1.50 2

This is a panoramic report on employment and working conditions in industry today as contrasted with the early 1800's. It shows that improvements in factory working conditions are a continuous process, and a matter about which management is constantly and seriously concerned.

GRANDVILLE'S METAMORPHOSES (IND)

12 minutes $3.75 5

This motion picture presents a world of fantasy created by the revengeful caricaturist Grandville. Grandville's intention is quite simply to ridicule the follies of his contemporaries by changing them into beasts in human dress, representing all the foibles of human nature.

GRAY GULL THE HUNTER (EBF)

19 minutes $3.00 4

The gripping story of the struggle for existence among the bird life on a rocky Swedish island, with the gray gull in the role of a ruthless marauder. Photographed by ARNE SUCKSDORFF. Other sea birds—the murre, the ring plover, the merganser duck, the arctic tern, and the sea mew live in fear of the robber gull. Primary, Middle, Jr. High, Sr. High, Adult.

GROWTH OF SEEDS (EBF)

14 minutes $3.00 4

Shows the sources from which plant seeds are obtained. Describes the structure of seeds and shows, by the use of the time-lapse camera, the processes of germination and plant growth. Jr. High, Sr. High, College.

GUIDING THE GROWTH OF CHILDREN (McGRAW-HILL)

18 minutes $3.00 4

Through personal experiences, a fifth-grade teacher shows that guiding the growth of the student, *as an individual*, is the most important part of the teacher's job. The audience sees how this teacher guides several "problem children," placing understanding of individual needs as the most important step in aiding the student. Correlated with Richey: *Planning for Teaching.*

HANDMADE MATERIALS FOR PROJECTION (Ind. U)

20 minutes $3.75 5

Demonstrations of how the basic principles of transparency, translucency, and opaqueness can be applied to the preparation of teaching materials for use in overhead, standard slide and opaque projectors. Shows the carbon-film method of making a transparency for projection of typed materials, the use of adhesive colored materials and textured backgrounds.

HAWAII—OUR NEXT STATE (McGRAW-HILL)

26 minutes $2.25 3

An overall survey of the geography of the Hawaiian Islands, the life of the people there, the industries.

HEREDITY AND PRENATAL DEVELOPMENT (McGRAW HILL)

21 minutes $3.00 4

A description of the growth, subdivision and union of male and

Unit Value

female sex cells, of the fertilization of the ovum by the sperm cell, and the prenatal development of an offspring is found in this film. The development of the basic physiological actions in a new-born and the connection between physical and emotional sensitivity in very young children are considered. Correlated with Hurlock. *Child Development.*

HIGH CONTRAST PHOTOGRAPHY FOR INSTRUCTION

(Univ. of Indiana)

12 minutes $3.75 5

Demonstrates the use of high contrast photography for the preparation of 2" x 2" and 3¼" x 4" negative and positive slides, transparencies, and overlays for overhead projectors and for printing on paper for use in opaque projectors. Shows the basic step of setting up to photograph materials on high contrast film as well as the processing of the film. Illustrates the application of this type of photography in the preparation of instructional materials in a variety of subject-matter areas. (color)

HIGHWAY NORTH (NFBC)

18 minutes—color $1.50 2

A film trip through the interior of British Columbia along Highway 97—romantic link with the days of the Wild West. It follows the route from the Canada-U. S. border to beautiful Lake Okanagan, toward the foothills of the Selkirk range with its relics of the days of the Gold Rush, and to Williams Lake, hub of the Cariboo ranching country. From Williams Lake the route moves northward to new vistas, ending finally at Dawson Creek where Highway 97 joins the Alaska Highway.

HOW GOOD ARE OUR SCHOOLS? (NEA)

28 minutes $1.00

This film, based on Dr. James B. Conant's best-seller "The American High School", shows what every secondary school should be equipped to do, by taking you into two excellent comprehensive high schools—one in Oakland, California, the other in Labette County, Kansas. The schools provide for the varied interests of all the students in their communities.

HOW TO MAKE AND USE A DIORAMA (McGRAW-HILL)

20 minutes $3.00 4

This film demonstrates through several school situations the construction of the diorama framework and the preparation of realistic miniature scenes. The dioramas of a farm, mountain scene and a Middle Eastern village shown in the film being made by teachers and students provide helpful suggestions on effective techniques and materials.

THE HUMAN BRAIN (EBF)

11 minutes $2.25 3

Describes the brain and compares its development in several animals and in man. Differentiates the functions of the medulla and cerebellum, and describes the cerebrum in detail. Illustrates the cerebral functions of perception, motor control, analysis, integration, planning future acts, and elaborating responses as applied in a critical situation. Jr. High, Sr. High.

IMPROVING STRAINS OF LIVESTOCK (APPLICATIONS OF GENETIC PRINCIPLES) (EBF)

13 minutes $3.00 4

Essential procedures in improving strains of livestock are shown

Unit Value

in operation at an up-to-date breeding farm. Techniques of selecting parent stock are described, and examples of inbreeding and outbreeding shown. The pioneering roles of Robert Bakewell and Gregor Mendel are identified. This film was formerly titled "Animal Breeding." Jr. High, Sr. High.

THE INCREDIBLES OF DEBUCOURT (IND)

12 minutes $3.75 5

Through the art of Debucourt, this film attempts to recreate the feelings of a period of history marked by anxieties. Among other things, the people of this day adopted excessive mannerisms to overcome their anxieties. In his candid representations, Debucourt recorded these minute details of the snobbishness of the time. His art is undoubtedly small, but it shows that even in the time of the revolution, there were amusing moments.

INDIAN DANCES (EBF)

10 minutes—color $4.50 6

Reveals the Indian as a keen observer of nature and demonstrates his relationships with natural phenomena. To the dramatic accompaniment of tom-tom rhythms, and Indian dance patterns based on the characteristics of the prairie grouse courting, the eagle in flight, the buffalo, and the deer. Middle, Jr. High.

INDIANS OF EARLY AMERICA (EBF)

22 minutes $3.00 4

Photographed on locations throughout the entire United States and Canada, this film re-creates the environment and typical activities of tribes from four major regions—the Eastern Woodlands, the Midwestern Plains, the Southwest, and the Northwest Coast. It includes sequences on the ceremonies attending the death of an Iroquois chief and the election of his successor; a Sioux buffalo hunt; pottery making in a pueblo village; and a potlatch ceremony, conducted by the headman of a Northwest coastal tribe. Middle, Jr. High, Sr. High, Adult.

INSECT LIFE CYCLE (THE PERIODICAL CICADA) (EBF)

11 minutes $2.25 3

Follows the visible phases of the life cycle of the periodical cicada. Recorded in nature, it captures some rare moments of the emergence, transformation and hatching of this most unusual insect of North America. Animated diagrams trace the hard-to-see phases. Middle, Jr. High, Sr. High, College.

INSECTS (EBF)

11 minutes $2.25 3

Defines the class of animals known as insects. Identifies the principal characteristics of insect groups represented by butterflies, wasps, beetles, flies, and grasshoppers; and points up differences between true insects and their near relatives. Reveals life cycles, feeding habits, and protective coloring of a variety of insects. Tells how to encourage beneficial insects and combat pests. Middle, Jr. High, Sr. High.

INTERDICTION AND BLOCKADE (McGRAW-HILL)

28 minutes $6.00 8

The story of how the American high command, faced with the knowledge that there could never be a decisive land battle in the South Pacific, used air and sea power to destroy the Japanese war machine by denying the enemy the vital lines of supply and communication.

Unit Value

INTRODUCTION TO THE METHOD OF LEONARDO DA VINCI (IND)

12 minutes $3.25 5

Using paintings, combined with the commentary of the French poet Paul Valéry, this film represents an approach to the understanding of Leonardo da Vinci. The mechanism of the painter's creativeness is analyzed through Valéry's study, *Introduction to the Method of Leonardo da Vinci.* Valéry considers da Vinci to be a genius without a single weak point, a kind of god, who, knowing everything, rejects all mystery.

IRRATIONAL NUMBERS (McGRAW-HILL)

23 minutes $3.75 5

Scenes of an actual classroom in action, with interpretative comments from Dr. Meder, vividly demonstrate the Commission's suggestion for teaching *irrational numbers* through the study of decimal fractions. The limited understanding of irrational numbers in past teaching is eliminated by this new method which leads to a positive demonstration of what an irrational number is. The teaching method for communicating these new ideas to others is clearly shown in these classroom scenes.

JAMESTOWN (THE FIRST ENGLISH SETTLEMENT IN AMERICA) (EBF)

22 minutes $4.50 6

Photographed in the reconstructed Jamestown fort and its vicinity, it tells how the Jamestown colony found economic prosperity in tobacco planting. Using John Rolfe as the central character, it dramatizes the struggle between the aspirations of the colonists for self-government and the need for a strong central government during the beginning years. Shows the development of plantations in the Jamestown settlement and the creation of the first legislative body in the New World. Middle, Jr. High, Sr. High, Adult.

THE JAPANESE PERIMETER (McGRAW-HILL)

28 minutes $6.00 8

A dramatic account of the decisive battle at Midway in the Pacific, where American air and naval units turned the tide of the Japanese offensive into a conclusive and far-reaching defeat.

JET PROPULSION (EBF)

13 minutes $3.00 4

Provides a graphic explanation of jet propulsion and its use in modern aircraft. Explains through animation the workings of jet engines and the principles of physics on which they are based, with special emphasis on Newton's third law of motion. Shows various types of jet engines and their uses. Portrays jet aircraft in flight and suggests future potentiality. Middle, Jr. High, Sr. High.

JOE TURNER, AMERICAN (NATIONAL ASSOC. OF MFG.)

29 minutes $1.50 2

This film demonstrates that citizens can not abdicate the conduct of government to the "professional" and expect to get value received for their tax dollar.

KAMIKAZE (McGRAW-HILL)

28 minutes $6.00 8

Captured Japanese film graphically tells the story of the inten-

Unit Value

sively trained kamikaze pilots-suicide squadrons whose mission was to crash head-on into American aircraft or dive into American Navy ships during the invasion of Okinawa.

THE LABYRINTH OF PIRANESI (IND)

12 minutes $3.75 5

This film explores the engravings of an imaginary city created by Piranesi. This monument began as an attempt to reconstruct the ancient city of Herculaneum. The engravings shown include ancient Roman architectural scenes; however, emphasis is placed on the famous series *I careeri* (The Prisons).

LAWS OF MOTION (EBF)

13 minutes $3.00 4

Explains Newton's three laws of motion and points up important events leading to their discovery. Experiments with moving balls illustrate the theory of the laws, while other examples provide dramatic evidence of their application. Includes demonstrations using autos in motion on curves and slippery surfaces, a locomotive, an airplane, and a gun in action. Jr. High, Sr. High.

LEARNING ABOUT FLOWERS (EBF)

10 minutes—Color $4.50 6

Portrays in vivid photography the story that there are many different kinds of flowering plants. Time-lapse photography is extensively used to show the opening of some of the more common flowers of our fields and gardens. The film is designed to help the student appreciate the beauty in flowers and to realize that the purpose of the flower is to produce seed.

LEARNING ABOUT LEAVES (EBF) (AN EB JUNIOR)

11 minutes $2.25 3

Explains with time-lapse photography, animation and skillful close-ups, how leaves are important to plants, animals, and man. Compares different kinds of leaves—those of many common trees, lawn plants, and evergreens, and shows how leaves are related to other parts of a plant, the stem and roots. The functions of green leaves, making and storing foods, and the changes that take place during the different seasons, are clearly illustrated. Middle grades.

LEARNING DISCRIMINATIONS AND SKILLS (McGRAW-HILL)

10 minutes $2.25 3

In a detailed analysis of the learning process, this film demonstrates that the learning of a skill by any organism involves two basic and closely integrated processes: discrimination between stimuli and application of this discrimination in the making of selected responses. Laboratory experiments with pigeons are shown in the demonstration.

LET'S GO TO THE CIRCUS (EBF)

9 minutes $2.25 3

From a ringside seat at the circus see the thrills and spectacles of the world's greatest show. Beautiful aerial ballerinas, skillfully performing acrobats, hilarious clowns, exciting racing horses, majestic elephants pass in gay review. Primary, Middle

LIFE IN THE FOREST (EBF)

11 minutes $2.25 3

Shows how forests, like cities, are constantly changing and are

Unit Value

densely populated. The probing telephoto lens reveals how even the trunk of a dead tree teems with life. What is food for one denizen may be a threat to another, but all depend on plant life for food and shelter. Middle, Jr. High, Adult.

LIFE IN THE GRASSLANDS (NORTH AMERICA) (EBF)

11 minutes $2.25 3

Depicts plant, animal and insect life on the grasslands, illustrating the inter-relationships of living things and their surroundings. The beautiful photography should lead to appreciation as well as understanding of the grasslands ecology. Middle, Jr. High, Adult.

LIFE IN THE SEA (EBF)

11 minutes $2.25 3

This film provides a fascinating glimpse of life under the surface of the sea. It divides sea life into three general groups: the plankton, the bottom dwellers and the free-swimming animals. The film describes the inter-relationship of plants and animals in providing a chain of food and maintaining a delicate balance of life. Middle, Jr. High, Sr. High, Adult.

THE LITTLE BLACK LAMB (EBF)

11 minutes $2.25 3

Tells a delightful story of Mary and her little lamb, a black one, and how it wins a place in Mary's heart. Primary, Middle.

LIVE AND LEARN (EBF)

13 minutes $3.00 4

Illustrates some of the common accidents that happen to youngsters when they act first and think afterwards. Points up the dangers of jumping from a high place, playing with fire, playing in the street, standing in a canoe, running with scissors, and playing with guns. Middle, Jr. High.

LUFTWAFFE (McGRAW-HILL)

28 minutes $6.00 8

This dramatic and terrifying story of the rise of the Nazi air force, told for the most part from captured German films, reveals how the powerful German Air Force was secretly created prior to 1939 and the part it played in the Spanish Civil War and in the beginnings of World War II.

MARINE HIGHWAY (NFBC)

19 minutes—color $1.50 2

A camera tour of Nova Scotia's scenic ocean route, Highway No. 7. Picturesque names like Clam Bay, Sheet Harbor, Mahone Bay, Portuguese Cove and Ecum Secum suggest the quaint maritime atmosphere. Scenes vary from surf crashing on rocky crags to peaceful villages dividing activity between fishing and farming. It gives full coverage to seasonal sports activities and to lend a salty air the film includes a number of old Nova Scotia folksongs telling tales of the sea.

MEETING THE NEEDS OF ADOLESCENTS

19 minutes $3.00 4

The story of a 14-year-old boy and his 17-year-old sister, pointing out what parents can do to help adolescents.

EIGHT STEPS TO PEACE—NO. 5—MEMBERSHIP IN THE UN (PIERCE-BUTLER FD.)

13½ minutes $1.50 2

How the nations of the world through membership in the UN

Unit Value

can experience peace and freedom yet retain their sovereignty is explained by Vanessa Brown.

MICHAEL DISCOVERS THE MAGNET (EBF)

11 minutes—sound $2.25 3

Using familiar objects in simple experiments at home, Michael learns about magnetism. Then he puts on a show for his friends to demonstrate some of the exciting things that can be done with magnets. Primary, Middle.

MINERALS AND ROCKS (STONES OF THE EARTH) (EBF)

16 minutes $3.00 4

The camera follows two young rock collectors as they gather specimens and make standard identification tests, such as color, streak, hardness, chemical and fracture tests. The film also shows how igneous, sedimentary, and metamorphic rocks were formed, and explains ways of recognizing each. Middle, Jr. High.

MR. WITHERS STOPS THE CLOCK (ALLEY PROD.)

27 minutes—sound—color $1.50 2

Depicts some of the benefits an airport confers on a community. High School, Adult.

MOLLUSKS (SNAILS, MUSSELS, OCTOPUSES, AND THEIR RELATIVES) (EBF)

14 minutes $3.00 4

Discusses the five classes of mollusks, picturing their physical characteristics, reproduction processes, feeding habits, and ways of protecting themselves. Shows the special habitat in which each of these animals is to be found. Touches upon the ways in which members of the mollusk family are useful to man. High, Sr. High, College.

A MONKEY TALE (BICYCLE SAFETY) (EBF)

9 minutes $2.25 3

This unusual film from New Zealand contains amusing and effective illustrations of both the safe and the dangerous ways to ride a bicycle. The demonstrations are performed by a family of monkeys. Primary, Middle.

THE MONKEY WHO WOULD BE KING (EBF)

11 minutes $2.25 3

With real animals playing all the roles, a popular fable comes to life in this appealing film. When the mighty lion decides he is tired of being King of the Beasts, all of the animals meet to see whom he will choose to be the new king. The monkey snatches the crown, and the lion says, "Let him be king if he thinks it's fun." Through a clever plot, planned for the fox, the monkey learns that it takes more than a crown to make a king. Primary.

MOTHER RABBIT'S FAMILY (EBF)

11 minutes $2.25 3

From the day her babies were born, Mother Rabbit finds Hoppy to be especially curious. As Hoppy grows we see him learn to be a good rabbit even when his curiosity leads him into mischief. He almost falls prey to a hawk and he gets caught by two children, but his good mother brings him safely home again. While telling this simple story, the film also draws attention to some of the characteristics of rabbits. Primary.

Unit Value

THE NEW DOCTRINE (McGRAW-HILL)

28 minutes $6.00 8

A timely report on the atom hydrogen bomb era, the development of the ultimate weapon by the United States and Russia, and their continuing search for an ultimate delivery system—the intercontinental ballistic missile.

NEW FRONTIERS OF MEDICINE (McGRAW-HILL)

17 minutes $3.00 4

Recent discoveries such as sulfa drugs, penicillin, and streptomycin used during the war and the increased opportunities for medical students from all parts of the world to study in U. S. Control of heart disease, cancer, rheumatic fever, RH blood factor are shown in this film.

NEW INDUSTRIAL SOUTH (McGRAW-HILL)

26 minutes $3.00 4

Describes the town of Camden, South Carolina, as an example of the trend toward a more industrial economy.

THE 1930'S (McGRAW-HILL)

28 minutes $6.00 8

With Lt. General James H. Doolittle and Walter Cronkite narrating, this film covers the major struggles of the 1930's and includes glimpses of many of the leading figures of that period.

NOBODY'S CHILDREN (McGRAW-HILL)

17 minutes $2.25 3

The dangers inherent in lax child adoption procedures. Documents the more advanced methods of screening applicants for children and selecting the most suitable home for the child.

NOTHING BUT AIR (EBF)

11 minutes $2.25 3

A normal boy in one ordinary day has many experiences with air. He learns that, though invisible, air is very real. Air occupies space, air is all about us, air has weight, air in motion has power and serves man in various ways. Primary, Middle.

NOUNS AND VERBS VERSUS ADJECTIVES AND ADVERBS (IND)

30 minutes $6.00 8

Professor Peterson discusses the function of the four most useful parts of speech. He shows that weak adjectives and adverbs can often be omitted by careful selection of nouns and verbs. Through many illustrative sentences, he develops the concept that one forceful noun or verb is better than a combination of an adjective and a noun or of an adverb and a verb.

NUMBER FIELDS (McGRAW-HILL)

17 minutes $3.75 5

Here, Dr. Meder takes up the specific problems of the student who solves an algebra problem without understanding *why* his answer works. Dr. Meder shows the weakness of manipulative solutions, and demonstrates how the teacher's understanding of the properties of *a number field* enables the teacher to make algebra more meaningful for students. With the use of animated diagrams, Dr. Meder discusses the system of integers, real numbers, rational numbers and complex numbers, from the point of view of number fields, and explains the requirements and properties of a number field.

Unit Value

OCEAN VOYAGE (EBF)

14 minutes $3.00 4

An apprentice officer, Niko Catsis, tells the story of life aboard the S.S. Olympia. The film shows the excitement of leaving New York harbor, activities on the bridge, in the engine room, galleys, dining rooms, and passengers' and crew's quarters. Illustrates the use of radar to make sailing safe. Primary, Middle.

OIL FOR ALLADIN'S LAMP (SHELL OIL)

20 minutes $1.50 2

Research scientists have a place of honor in this picture. In a trip through the laboratory, the audience sees the creation of chemical miracles from petroleum, including the making of rubber and plastics. High School, College.

OPERATION HURRICANE (U. S. Weather)

14 minutes $1.50 2

Shows how Weather Bureau warning centers reduce the hurricane menace along the Gulf and Atlantic coasts, the operation of the Bureau's warning service, precautions taken against damage, and rescue and relief measures. Animation explains the nature of hurricanes.

OPPORTUNITIES UNLIMITED (NATIONAL ASSOC. OF MFG.)

14 minutes $1.50 2

This is a documentary film describing the achievements of physically handicapped persons in the United States in gaining recognition for their abilities and achieving the status of self-supporting citizens. The film shows the painful process of rehabilitation of injured and disabled persons, their efforts to re-acquire their old skills or learn new ones, and finally their efforts to find profitable employment. High School thru Adult.

OSMOSIS (EBF)

14 minutes $3.00 4

By means of photomicrography, time-lapse photography, and animation, this film illustrates the inner mechanism of plants and explains how water is transported throughout the plant. Laboratory experiments illustrate osmosis action, and the other film techniques support the laboratory experience by explaining the laws of nature that make osmosis work. Jr. High, Sr. High.

OTTAWA, CANADA'S CAPITAL (NFBC)

14 minutes $1.50 2

Ottawa today provides many colorful impressions of the beautiful and busy headquarters of a vital growing nation. More than a capital it is also an international city, for Canada's growing importance in the world has brought to her avenues, embassies and legations from all parts of the world. Jr. High thru Adult.

OUR POST OFFICE (EBF)

11 minutes $2.25 3

When Jimmy and Susan mail a letter ordering a present for their mother, we go behind the scenes at the postoffice to see how their letters and the rest of the mail is sent out. We see how letters are canceled and sorted; how airmail and special delivery letters are handled. The film highlights every-day activities in a city post office, at an airport where mail is loaded on a helicopter, and in a railway postoffice. Primary, Middle.

Unit Value

OUR WEATHER (EBF)

11 minutes $2.25 3

Shows how weather affects our lives, what causes the weather, how weather conditions are measured and forcast. Middle, Jr. High.

OUR WORLD OF SCIENCE (EBF)

11 minutes $2.25 3

Explains what science is and how we learn about science. Introduces and defines the words "science" and "experiment," and demonstrates a simple experiment which second graders can do. Develops the idea of an orderly universe and shows a clear-cut working procedure for problem solving in science. Primary, Middle.

PACIFIC PATTERN (McGRAW-HILL)

28 minutes $6.00 8

This film tells the story of how American carrier-based air power supported the invasion of Tarawa in the Gilbert Island and how it was used to neutralize the island of Truk—making further American invasions easier.

PALOMINO: THE GOLDEN HORSE (EBF)

11 minutes $2.25 3

Exciting instruction in basic fundamentals of horsemanship. General care of horses, basic instruction in correct mounting, gaiting, holding the reins, and similar practices. Primary, Middle.

PATTERNS IN MATHEMATICS (McGRAW-HILL)

14 minutes $3.75 5

Dr. Meder explains the statement of the Commission on Mathematics," "Algebra must be treated as a study of mathematical structure rather than only as the development of manipulative skills." An emphasis on this structure, or *pattern*, is the basis of all curriculum revision recommended by the Commission, and Dr. Meder explains clearly and with varied examples *why* mathematics should be considered a study of pattern, rather than a collection of isolated facts and tricks. With problems taken from arithmetic, algebra, geometry and trigonometry, he shows how concepts of pattern can make mathematics teaching clearer and more meaningful.

PEARL HARBOR (McGRAW-HILL)

28 minutes $6.00 8

Official films of the Japanese Navy, captured after World War II, present in starkly realistic terms every significant detail of the fiery attack on the American naval bastion at Pearl Harbor.

EIGHT STEPS TO PEACE—NO. 3—A PERMANENT UN POLICE FORCE (PIERCE-BUTLER FD.)

13½ minutes $1.50 2

The history of the United Nations "Emergency Police Force," is described by Henry Fonda who charts its initial success and urges that it become a permanent UN institution.

PERSONALITY AND EMOTIONS (EBF)

13 minutes $3.00 4

Designed for high school and college audiences studying personality development and mental health. Gives an overview of the development of emotions from infancy through early childhood,

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and implies that emotional maturity is a desirable goal in the development of personality. Jr. High, Sr. High, College, Adult.

PICTURE OF BRITAIN (EBF)

23 minutes $3.75 5

Presents a social and industrial view of modern Britain and its people. Many phases of British daily life are shown, providing an authentic atmosphere and flavor of the nation and its people today. Middle, Jr. High, Sr. High, College.

PICTURESQUE GASPÉ (NFBC)

30 minutes—color $1.50 2

This film tours the whole peninsula from the quaint fishing villages of the shoreline to the high plateau of the interior. It takes in the industries along the way, mainly fishing and pulp and paper. It provides glimpses of other sources of tourist satisfaction—deep sea fishing, inland fishing and many picturesque ceremonies.

PIPELINE (SHELL OIL)

24 minutes $1.50 2

This film illustrates and explains the building of a pipe-line one thousand miles long, from Jal, New Mexico, to Wood River, Illinois. It shows the hardships and difficulties that are presented by such a large construction project, how they were overcome, as well as the skill and equipment necessary for the completion of the pipe-line. (color).

PLANNING FOR PERSONAL AND PROFESSIONAL GROWTH (McGRAW-HILL)

18 minutes $3.00 4

A dramatic case study of the personalities and careers of four teachers, this provocative film vividly illustrates the importance of planning for personal and professional growth. From case histories, the audience can draw the answer to the concluding question, "Why is it that teaching can be a source of dullness and frustration for some—and a rich and rewarding experience for others?"

POULBOT AND THE CHILDREN OF MONTMARTRE (IND)

12 minutes $3.75 5

This film attempts to reveal the sensitivity and affection which Poulbot felt for the children of Paris. In his art, Poulbot devoted much of his time to depicting the miseries and joys of the little street urchins of Paris who still bear his name. They are called "Les Petits Poulbots." They still exist in Montmartre and can be seen at every corner—dirty, miserable, sometimes hungry, but free.

THE PRESIDENT PLANTS A TREE

7 minutes—color $1.50 2

The White House has a special significance for all American citizens. Each President has left his mark on the official executive residence. Some of the finest contributions to its beauty have been made by trees planted by our Presidents on the White House lawn. Many of these trees are shown in their present splendor. Here, following tradition, President Eisenhower plants the tree of his choice for future generations to enjoy. (TV use permitted.)

PRICE OF FREEDOM, THE (NATIONAL ASSOC. OF MFG.)

23 minutes $1.50 2

This film is designed to demonstrate that "The Price of Free-

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dom" is a matter of individual responsibility and that personal freedom can be lost through apathy, disunity, and misunderstanding. This is told through the story of a young reporter, who, on returning from a trip to Europe, discovers in the United States some of the same atmosphere and attitude which made Hitler's rise possible in Germany. A disagreement with his publisher-father, who considers him an alarmist, provides the plot of the story.

PRINCIPLES OF DEVELOPMENT (McGRAW-HILL)

17 minutes $3.75 5

This film outlines the fundamentals of growth from early infancy through childhood. Development follows a pattern which is continuous, orderly, progressive and predictable. The film considers the many variables which make each child different from every other one. Correlated with Hurlock: CHILD DEVELOPMENT. (College, Adult.)

PROBLEM OF PUPIL ADJUSTMENT—THE DROP-OUT (McGRAW-HILL)

20 minutes $3.00 4

Steve Martin left school as soon as the law permitted. The reasons why school failed to meet his needs are examined in this film. The type of curriculum which Steve found dull and monotonous is discussed. The film emphasizes the importance of a life-adjustment program in the school, including the relation of the class subjects to the interests of the students. Correlated with Sorenson: *Psychology in Education.*

PROBLEM OF PUPIL ADJUSTMENT—THE STAY-IN (McGRAW-HILL)

19 minutes $3.00 4

This is a study of a school that reduced the number of students who drop out of school to a small percentage because its curriculum concentrates on meeting the needs of the students. The school program stresses learning in terms of actual everyday living. Correlated with Sorenson: *Psychology in Education.*

PROMOTING PUPIL ADJUSTMENT (McGRAW-HILL)

20 minutes $3.00 4

The social and emotional growth of her pupils should be as important to a secondary school teacher as their intellectual progress. For well-adjusted pupils, appropriate guidance gives a firmer direction for good growth. For others, such as the unaccepted newcomer, the child who lacks self-confidence or the one who suddenly develops a strange, unsocial behavior—guidance can be even more important.

PROTOZOA (ONE-CELLED ANIMALS) (EBF)

11 minutes $2.25 3

This remarkable film, photographed by the distinguished scientist and photomicrographer, Dr. Roman Vishniac, is an intimate close-up exploration of the world of one-celled animals. Identifies pseudopods, flagelettes, and ciliates. Shows how they move, how they eat, and how they reproduce. Provides striking examples of symbiosis, parasitism, and colonial organizations. Employs unique camera techniques to examine phenomena that have rarely been captured on film. Sr. High, College.

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PUSS IN BOOTS (EBF)

16 minutes $3.00 4

The well-known fairy tale is re-told with animated puppets. Made by the German craftsmen, the Dietz Brothers, the puppets are truly artistic creations of romantic figures from the German folklore. Considered to be one of the most successful stop-motion pictures with puppets. Primary, Middle.

THE QUARTERBACK (NATIONAL ASSOC. OF MFG.)

29 minutes $1.50 2

This film shows that in life as in football, success and economic security can be achieved only by initiative, planning, preparation and hard work; that productivity is as important in an executive or white collar worker as in manual employment.

THE RACCOONS' PICNIC (EBF)

5 minutes $1.50 2

While their parents, like sensible raccoons, are sleeping through the day, Beatrice and Willie set out to explore the rocks and woods. Meanwhile, two boys have gone for a swim, leaving their lunch packs on the lake shore. Guess who has the picnic? Primary, Middle.

REMBRANDT, MASTER OF THE NIGHT (IND)

12 minutes $3.75 5

Devoted entirely to the presentation of Rembrandt's etchings, this portrait of the life of the great Dutch painter is developed chronologically. Special effort is made to clarify Rembrandt's mastery of light in portraying not only the soul of the artist but also the spirit of the individuals he draws. Film text material includes quotations by the poet Paul Claudel.

REMEMBRANCES OF TIME PAST (IND)

12 minutes $3.75 5

In this film, two artists' visions are confronted: Vermeer's paintings and Proust's writings. It was looking at the paintings of Vermeer that Proust remembered most strikingly and most differently all that he knew. "That is how I should have written," he said. "What makes for the absolute beauty of certain things . . . is a kind of transparent unity in which all things lose their superficial character to be marshalled together in a kind of order infused with the same light which is incapable of being assimilated."

REPTILES (EBF)

14 minutes $3.00 4

Introduces the five orders of reptiles remaining on earth: lizards, turtles, tuataras, crocodilians and serpents. Describes the physical characteristics of these animals, their reproduction processes, feeding habits and special habitats. Points out some of the ways in which reptiles are useful to man. Middle, Jr. High, Sr. High, College.

REPUBLIC OF ITALY (McGRAW-HILL)

17 minutes $2.25 3

Story of modern Italy with emphasis on the chaotic condition at the end of World War II. Includes sequences on the Vatican City.

RIGHT ANGLE (NEA)

28½ minutes $1.00

Dave Hall, young reporter, had a chance to make a name for himself by writing an article sharply critical of the local school sys-

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tem. He keyed his first story to a girl with below average IQ, whom he had seen working in arts and crafts. Dave's question: Should she get a high school diploma for this sort of thing? Is it worth the taxpayer's money? Dave switched news angles in midstory and sold his editor on his new approach, that all children are blessed with interests and talents and it is up to the public schools to develop these individual differences for the good of all.

ROAD TO KELTIC (NFBC)

18 minutes—color $1.50 2

A film trip during autumn along highways of Nova Scotia that lead through picturesque Maritime countryside across the new Canso Causeway linking the mainland to Cape Breton Island, and down the Cabot Trail to Keltic Lodge in beautiful Cape Breton Highlands National Park.

ROCKETS: HOW THEY WORK (EBF)

16 minutes $3.75 5

The film opens with dramatic scenes at a rocket launching site as a giant rocket is being prepared for take-off. It points out that rockets are designed to function above the earth's atmosphere. The film describes the need for control systems in rockets and illustrates a typical system. This consists of spinning gyroscopes which tend to maintain their pre-set direction.

ROUSSEAU: A TRIP IN THE LITTLE CART (IND)

12 minutes $3.75 5

It is in "The Little Cart," subject of one of Rousseau's most famous paintings, that this film takes its trip through Rousseau's private world. It is not a question of traveling very far to some distant isle out of disgust for this world. It is enough to let one's eyes travel—to take a look at the simplest of everyday realities.

SANTA AND THE FAIRY SNOW QUEEN (EBF)

26 minutes $4.50 6

The Fairy Snow Queen gives life to Santa's dolls on Christmas eve. Jack-in-the-box, Toy Soldier, Musical Doll, and other dolls dance and sing for Santa to the music of Tschaikowsky's *Nutcracker Suite* and *The Sleeping Beauty.* Snoopy the Brownie tells us that he visits toys every night to see if they're being well treated by the child owners. Primary, Middle.

SCHOOLS, SATELLITES, AND SURVIVAL (NEA)

28 minutes $1.00

The American Educational System faces up to the challenge of survival as a free nation. This film is a documentary study of development of American Education since 1900. Some of the highlights of the film is a visit to an eighth grade Science class, plus interviews with several notable Americans.

SCHWEINFURT (McGRAW-HILL)

28 minutes $6.00 8

A picture of the massive air raid staged by American B-17 bombers against the German ball bearing industry that ended in one of the great defeats the U. S. Air Force suffered over Germany during World War II.

SEA ADVENTURES OF SANDY THE SNAIL (EBF)

16 minutes $3.00 4

Betty Ohlrogge, accomplished artist and teacher, narrates the

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story while she creates, through the medium of finger paints, the beautiful world of the ocean floor as it might appear to a tiny snail, transported from a small aquarium to the great Pacific Ocean. During his journey, a puffer, a pair of sharks, an abalone, and a sea horse. Primary, Middle.

THE SEARCH: HARVARD UNIVERSITY (McGRAW-HILL)

27 minutes $3.75 5

Harvard specialists explain how they survey a community to determine its school status and needs.

THE SEARCH: OHIO STATE UNIVERSITY (McGRAW-HILL)

27 minutes $3.75 5

A documentation of the work of Dr. Samuel Renshaw and others in the field of visual perception.

THE SEARCH: YALE UNIVERSITY (McGRAW-HILL)

27 minutes $3.75 5

Discusses new ideas and new techniques that help to determine normalcy in children.

SENTENCE AND SOLUTION SETS (McGRAW-HILL)

21 minutes ..... $.75 5

Through actual classroom scenes, a ninth grade algebra teacher is shown teaching the concept of *set*. Dr. Meder explains and illustrates with the classroom scenes the way to introduce sets, variables and open sentences to students. He gives examples that show how the concept of set makes the teaching of inequalities, as well as equations, simpler and clearer. With a solid understanding of these basic concepts, even the average student will progress more rapidly and with greater success than ever before.

SINGING ON THE MOUNTAIN (HUGH MORTON)

12 minutes $1.50 2

This film is a photographic record of the Annual Singing on the Mountain. This annual gathering of thousands of mountain folk is one of the largest community song festivals in America in a setting of incomparable scenic beauty.

SIR FRANCIS DRAKE (THE RISE OF ENGLISH SEA POWER) (EBF)

30 minutes $4.50 6

With rich, authentic settings and a superb English cast, the film re-creates the most important episodes in Drake's life—shows how he won England the right of way into a new continent; captured a vast treasure of gold, silver, and precious stones for his Queen; terrorized the Spanish navy, and persuaded the people of England to "look to the sea for their strength." Middle, Jr. High, Sr. High, Adult.

SKIPPER LEARNS A LESSON (EBF)

10 minutes $2.25 3

A little girl and her dog, Skipper, move to a neighborhood where youngsters of different races play together. Skipper snubs the dogs belonging to these youngsters. Later, through an embarrassing episode Skipper realizes his mistake, and understanding is established among all. A simple and delightful story on intercultural understanding. Primary.

SOCIAL DEVELOPMENT (McGRAW-HILL)

16 minutes $3.00 4

This is an analysis of social behavior at various age levels, show-

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ing how behavior patterns change as a child grows. The film shows how understanding parents can make inevitable social adjustments much easier and smoother. College, adult.

THE SPEED OF LIGHT (MEASUREMENT AND APPLICATIONS) (EBF)

14 minutes $3.00 4

Shows how Galileo, Fizeau, Roemer and Michelson contributed to the measurement of the speed of light and indicates some of the most important applications of this constant today. Michelson's famed experiment is shown in animation. Jr. High, Sr. High, College.

THE SPINAL COLUMN (EBF)

11 minutes $2.25 3

Supplementing live action scenes with X-ray and stop-motion photography, animated drawings, and graphic close-ups, this film provides a detailed study of the structure and functions of the spinal column. The five spinal regions are identified, the curvatures of the spine are described and the importance of good posture is stressed. Jr. High, Sr. High, College.

STARFIGHTER (McGRAW HILL)

28 minutes $6.00 8

Filmed at the Lockheed plant in Burbank and at Edwards Air Force Base, California, this is the story of the testing and acceptance by the U. S. Air Force of the Lockheed F-104, the fastest operational supersonic jet fighter in the world.

STRANGLE (McGRAW-HILL)

28 minutes $6.00 8

A description of the battle that freed Italy in World War II, the impasse at the Abbey of Monte Cassino and how it was solved by a new use of air power.

STYLE IN WRITING (IND)

30 minutes $6.00 8

Dr. Peterson presents the thesis that an individual's style of writing should be his true self. He points out that many people lose their naturalness when they begin to write. Quoting Lamb, Morely, Twain, Shakespeare, and others, he maintains that true elegance is always simple and honest. Criticizing the use of inflated or pompous verbs like *gaze, don, dwell, peruse, transpire, retire,* and *arise* for the more sincere *see, put on, live, read, happen, go to bed,* and *get up,* he urges beginning writers to avoid affectations and to be themselves.

SUI (Assn. Films)

26½ minutes—sound—color $1.50 2

Tells how natural gas was piped across desert wastes from Sui to Karachi. Presents the significance of this pipeline to the economic and industrial growth of Pakistan. High School, Adult.

"THE SUICIDE OF SOCIETY: VAN GOGH" (IND)

12 minutes $3.75 5

This film draws on Artaud's writing to confront the tragic story of Van Gogh. The problem of society versus the artist is important here. Artaud believed that Van Gogh was one of those people too deeply sensitive, able to see too much, who must be eventually destroyed by society whose existence he threatened. "Someday,"

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Artaud said, "Van Gogh's paintings, fortified with fever and good health, will come back to scatter the dust of the caged world which his heart could no longer bear."

SUPERFORT (McGRAW-HILL)

28 minutes $6.00 8

A graphic record of the costly invasion of Iwo Jima by the U. S. Marines and the advent of the B-29 strategic bomber as a decisive weapon in the war in the Pacific.

SWEDEN LOOKS AHEAD (McGRAW-HILL)

18 minutes $2.25 3

"Sweden's people, left in peace for over a hundred years have developed a way of life admired the world over. Little larger than California, she has been able to eliminate extremes of poverty and riches, and all benefit from her famed middle way. Controlled lumbering and reforestation, arable lands held by working farmers, an even distribution system featuring all types of cooperatives, and strong, progressive labor unions are only some of the aspects of her economic development. Depending upon both the East and West for her vital trade, Sweden looks ahead with high hopes that her way of life will be preserved.

THE TALENTED HANDS (NFBC)

18 minutes—color $1.50 2

This film shows how a renaissance in arts and crafts has spread through the Province. Many fine examples of pottery, ceramics, woodcarving, weaving, metal work and other handicrafts are displayed for the visitor. It shows how use is made of raw materials found right in the Province. In the need for expression each craftsman becomes his own teacher and tries in his own way to capture the charms of his Province.

TAPE RECORDING FOR INSTRUCTION (Univ. of Indiana)

15 minutes $3.75 5

Shows the use of tape recorders in teaching situation and presents some of the different models of recorders indicating their controls, various speeds, and purposes. Gives a demonstration of several microphone placements and offers suggestions for the improvement of recorded sound quality. Explains how to edit tapes by splicing and suggests many uses for tape recorders such as in language instruction, music groups, and conferences.

TARGET PLOESTI (McGRAW-HILL)

28 minutes $6.00 8

The grim story of the United States Air Force's surprise low-level bombing attack on the single richest target in Europe—the Rumanian oil refineries at Ploesti.

EIGHT STEPS TO PEACE #8

THE ANSWER NOW

13½ minutes $1.50 2

Presenting Tyrone Power, Raymond Massey, Henry Fonda, Robert Ryan, Vanessa Brown and Vincent Price as they speak out for World Peace, under law, through the United Nations.

TIPPY—THE TOWN DOG (EBF)

11 minutes $2.25 3

The delightful story of a terrier who escapes from his busy adult master and has many adventures before he finally returns and

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acquires a new and youthful owner. In his adventures, Tippy tries to make friends with a succession of people and animals: a neighbor, a large dog, an organ grinder's monkey, a dog-catcher, and the city firemen. Primary.

"TOLOUSE LAUTREC: THE NIGHT WATCHER" (IND)

12 minutes $3.75 5

The Parisian night as seen by Tolouse Lautrec is the theme of this film. It follows Lautrec from the Moulin Rouge, to the circus, even to the houses where women sit expectantly stiff. The film emphasizes that Lautrec did not pass judgment on his time but that he simply wished to put his finger on its pulse, giving to the eye the pleasure of surprising life without cheating, without alteration.

A TRIP TO THE MOON (EBF)

16 minutes $5.25 7

An imaginary rocket takes off to the moon and explores its surface. During the trip we learn many facts about conditions met in navigation to the moon. Once above the moon's surface, the film shows in detail the craters and "seas", the valleys and mountains that can be seen from the earth. The film combines animation and model photography to create a realistic illusion of a study of the moon's surface. Middle, Jr. High, Adult. (color)

USING ANALYTICAL TOOLS (McGRAW-HILL)

14 minutes $2.25 3

By demonstrating a typical student problem, the film shows how various counseling tools and techniques are applied. Used intelligently, these tools provide the basic information which enables the counselor and student to take the first step in the counseling process—identifying and analyzing the problem. Correlated with Williamson: *Counseling Adolescents.*

VENICE—QUEEN CITY OF THE ADRIATIC (EBF)

11 minutes $2.25 3

Portrays the distinctive features of this city "built on islands." Modern Venice is made understandable in terms of the city's origin, its rise to power and wealth through trade, its decline with the coming of new trade routes, and its survival as a thriving and impressive city through adaptation to new conditions. Middle, Jr. High, Sr. High, Adult.

VICTORY IN EUROPE (McGRAW-HILL)

28 minutes $6.00 8

The film covers the military situation as of December 1944, when the Allied armies had drawn up to the German border, poised for the final assault, and described the maneuvers and battles that crushed the Nazi empire.

"A VISIT TO LONDON IN 1860 WITH GUSTAVE DORÉ" (IND)

12 minutes $3.75 5

Departing from his usual role as a portrayer of the fantastic, Gustave Doré is presented in this film as a reporter watching life in London and showing it in great detail. Here Doré pictures the violent contrasts in the life of all its people from the highest to the lowest . . . .

WATER IN THE AIR (EBF)

11 minutes $2.25 3

Two boys on a farm learn about the water cycle by observation

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and experimentation. They learn that water gets into the air by "evaporation." Heat is necessary for evaporation. Water vapor is changed to drops of visible water and forms clouds, fog, dew or rain, to be evaporated into the air again. Primary, Middle.

WATERWAY HOLIDAY (NFBC)

30 minutes—color $1.50 2

The Trent and Severn River waterway system cuts through some of the loveliest lakeland scenery of southern Ontario. Travelling this water highway, connected by a series of locks, is a memorable experience in the film for a family from upper New York State who cover the route by cabin cruiser. It shows many scenes along the way such as Serpent Mounds Provincial Park, Kawartha Lakes, and the recreated Huron Indian village at Midland.

"WATTEAU'S FÉTÈS GALANTES" (IND)

12 minutes $3.75 5

This film concerns two French artists. One, the painter Watteau; the other, the poet Paul Verlaine. The blending of these two talents came about one day when Verlaine chanced to see an exhibition of work by Watteau. He was so impressed he wrote a series of poems called "Les Fétès Galantes." Here are combined the works of both artists.

WEIGHING WITH THE ANALYTICAL BALANCE (EBF)

18 minutes $3.00 4

Explains the practical value of the analytical balance, which can weigh objects to an accuracy of one 5-millionth of a pound. Points out and explains the various parts of the instrument and demonstrates the basic principles and procedures involved in its use. Analyzes each step in using the balance to weigh a sample of sugar. Jr. High, Sr. High.

WHAT ARE DECIMALS? (EBF)

12 minutes $2.25 3

By use of examples from child life, the significance of the position of the decimal point and the practical advantages of the decimal system are explained. The emphasis throughout the film is on the physical significance of the measurements of quantities discussed, so that meaning, not memorization, results. Middle.

EIGHT STEPS TO PEACE #4
WHAT'S IN IT FOR EVERYONE?

13½ minutes $1.50 2

Robert Ryan dramatically pictures the eventual rewards of peace, prosperity, and freedom that can be realized under a strong United Nations.

THE WINNING OF FRANCE (McGRAW-HILL)

28 minutes $6.00 8

An account of Allied air-ground operations against the German 7th Army after the Normandy invasion which saved Paris from ruin. The film shows how the Allies preceded the big breakthrough with the most massive use of heavy bombers as tactical weapons in World War II.

WORK OF THE BLOOD (EBF)

13 minutes—color $4.50 6

The structure of blood cells and the composition of plasma are revealed through laboratory analysis of a blood sample. Animated

Unit Value

drawings and X-ray motion pictures of the circulatory system illustrate the work of the blood—the circulation of food elements and other materials to all body cells; the removal of wastes; the equalization of heat distribution; and the defenses against disease. Jr. High, Sr. High.

EIGHT STEPS TO PEACE
WORLD LAW

13½ minutes $1.50 2
Tyrone Power presents the case for world law and explains how it can guarantee world peace, with justice for all nations.

WORLD SERIES OF 1957 (OFFICIAL SPORTS FILMS)

40 minutes $1.50 2
This film presents the highlights of all the important plays from each of the seven games of the 1957 World Series between the Milwaukee Braves and the New York Yankees.

WORLD WAR I (A DOCUMENTARY ON THE ROLE OF THE U.S.A.) (EBF)

28 minutes $4.50 6
Through documentary scenes of the period and the actual words of historical figures, this film brings to life the events which led the United States into war; describes the course of the war, and Wilson's role at the peace conference. The historical scenes were made available to Encyclopedia Britannica Films by the National Archives, Washington, D. C. Jr. High, Sr. High, College, Adult.

WORLD WAR II (PROLOGUE, U.S.A.) (EBF)

28 minutes $4.50 6
Through documentary scenes of the period, this film reviews the historic events which led to U.S. entry into World War II. Describes the "great dilemma" which faced Americans and shows the different stages through which American public opinion passed as the events in Europe took place. Follows the development of world conflict, from Japan's invasion of Manchuria to the bombing of Pearl Harbor, and U.S. entry into the war on December 8, 1941. Jr. High, Sr. High, College, Adult.

WORMS—THE ANNELIDA (EBF)

13 minutes $3.00 4
Presents a detailed camera study of the four classes of annelid worms, their structure, behavior, and habitats. Explains processes of locomotion, respiration, digestion, and reproduction, with special attention to the life cycle of the earthworm. Discusses the earthworm's usefulness to man. Jr. High, Sr. High, College.

WRITING FORCEFUL SENTENCES PART I (IND)

30 minutes $6.00 8
Reading from great writers like Poe, Conrad, Lamb, and others, Professor Peterson emphasizes that great writing results from straight thinking. He explains what a sentence is, how major and minor ideas are structured in a sentence, and how the conjunction *and* deludes writers. Dr. Peterson emphasizes that poor writing usually indicates poor thinking.

WRITING FORCEFUL SENTENCES PART 2 (IND)

30 minutes $6.00 8
Dr. Peterson discusses five methods for putting a sentence together to say exactly what is meant: (1) arranging the words in

Unit Value

order of importance: (2) placing the major idea in the main clause and the minor one in the subordinate clause; (3) keeping the minor clause at the beginning and the major clause at the end; (4) keeping the reader in suspense until the end of the sentence; and (5) inverting the sentence order. Each of these methods is illustrated with appropriate examples.

EIGHT STEPS TO PEACE #6
YOU AND THE UN

13½ minutes $1.50 2

The relationship between the individual and the United Nations is closely drawn by Robert Ryan as he reveals how this organization works for you.

YOUR MONEY IS WHAT YOU MAKE IT (NATIONAL ASSOC. OF MFG.)

29 minutes $1.50 2

This film suggested as basis for discussion of (1) Economics in a free market or (2) Government fiscal policies. It records a flannel-board demonstration of inflation, using a pair of scales as a device to show the relationship between supply of goods and prices. It describes three inflationary periods: The German inflation following the first world war. The American inflationary period from 1939 through 1950. The Korean War inflation, June 1950 through June 1951. It also suggests citizenship action to prevent inflation both by individual action in the marketplace and through urging sound government policies.

SUBJECT INDEX

ART

IMAGES OF ART SERIES:
Introduction to the Method of Leonardo da Vinci
Drawings by Degas
The Incredibles of Debucourt
A Visit to London in 1860 with Gustave Doré
Don Quixote by Gustave Doré
El Greco: The Secret of Toledo
From 1900 Until After World War I
Drawings by Fragonard
Grandville's Metamorphoses
The Dandies of Constantin Guys
Tolouse Lautrec: The Night Watcher
The Labyrinth of Piranesi
Poulbot and the Children of Montmartre
Rembrandt, Master of the Night
Rousseau: A Trip in the Little Cart
The Suicide of Society: Van Gogh
Remembrances of Time Past
Draughtsman of Everyday Events: Daniel Vierge
Watteau's Fêtè Galantes

AVIATION HISTORY

AIR POWER SERIES:
Advance The Bomber Line
Battle of Britain
Conquest of the Air
Counterblast
Defeat of Japan
Fools, Daredevils, and Geniuses
Interdiction and Blockade
Kamikaze
Luftwaffe
Pacific Pattern
Pearl Harbor
Schweinfurt
Starfighter
Strangle
Superfort
Target Ploesti
The 1930's
The Cold Decade-Airlift
The Cold Decade-Korean Stalemate
The Cold Decade-To The Yalu
The Day North America is Attacked
The Early Days
The Japanese Perimeter
The New Doctrine
The Winning of France
Victory in Europe

BIOLOGICAL SCIENCE FOR JR., SR. HIGH SCHOOLS

HUMAN BIOLOGY
Biography of the Unborn
Fundamentals of the Nervous System
The Human Brain
The Spinal Column
Work of the Blood (color)
LIFE SCIENCES
Animals
Crustaceans
Insect Life Cycle (The Periodical Cicada)
Insects
Mollusks
Protozoa
Improving Strains of Livestock
Reptiles
Worms-The Annelida
Plant Life
Growth of Seeds

PHYSICAL SCIENCE FOR JR., SR. HIGH SCHOOLS

Aerodynamics
Jet Propulsion
Chemistry
Weighing With The Analytical Balance
General
Osmosis
Light, Heat, and Sound
Energy from the Sun
The Speed of Light (Measurement and Applications)
Mechanics
Atmospheric Pressure
Gas Laws and Their Application
Laws of Motion

SCIENCE FOR MIDDLE GRADES

LIFE SCIENCE:
Animals Around the World
Big Land Animals of North America
Animals of the Indian Jungle
Big Animals of Africa
Bird Life
Bird Homes
Gray Gull The Hunter
Insect Life Cycles
Ants
Animal Ecology
Life in the Forest
Life in the Grasslands
Life in the Sea
Animal Adaptations
Animals at Work in Nature
Animal Homes
Animals and the Seasons
Animals in Autumn
Animals in Spring
Animals in Summer
Animals and Birds
Goldfinch Family (color)
Plant Life
Food From our Garden (color)
Learning About Leaves

SCIENCE FOR PRIMARY GRADES

Learning About Animals
Adventures of a Chipmunk Family
A Balanced Aquarium
Elephant Baby
Mother Rabbit's Family
The Raccoons' Picnic
Sea Adventures of Sandy The Snail
Learning About Pets
The Little Black Lamb
Palomino: The Golden Horse
Tippy-The Town Dog
Learning About the Physical World
Learning About Flowers (color)
Michael Discovers The Magnet
Our World of Science
Learning About the Seasons
Children in Autumn
Children in Spring
Children in Summer
Children in Winter
PHYSICAL SCIENCE:
Our Earth and Its Neighbors in Space
Earth Satellites
Our Weather
The Air Around Us
Nothing But Air
Minerals and Rocks
A Trip to the Moon
Rockets: How They Work

Exploring the Physical World
Water in the Air

SOCIAL STUDIES-LANGUAGE ARTS

Let's go to the Circus
Puss in Boots
A Monkey's Tale
Live and Learn
Indian Dances
Indians of Early America
World War I
World War II
The Monkey Who Would Be King
Jamestown: First English Settlement
Venice: Queen City of Adriatic
Sir Francis Drake
Christmas Rhapsody
Christmas through the Ages
Santa And The Fairy Queen
Basis Techniques For Landscaping
Picture of Britain
Our Postoffice
Amazon
Airport
Skipper Learns A Lesson
Ocean Voyage
Rumpelstiltskin
A Trip To The Moon
Personality And Emotions
Alaska: Reservoir Of Resources
What Are Decimals
Battle Of Yorktown
Agriculture Story
Explorer Launching
Mr. Finley's Feelings
Mr. Withers Stops The Clock
Good Place to Work
Hawaii Our Next State
Joe Turner, American
Oil For Aladdin's Lamp
Operation Hurricane
Opportunities Unlimited
Pipeline
Price Of Freedom
Quarterback
Singing on The Mountain
Sui
World Series of 1957
Your Money Is What You Make It

LANGUAGE ARTS

THE QUILL SERIES:
Style in Writing
Writing Forceful Sentences: Part I
Writing Forceful Sentences: Part II
From Sentences to Paragraphs
The Exact Small Things
Nouns and Verbs Versus Adjectives and Adverbs

TEACHER EDUCATION

Meeting the Needs of Adolescents

CHILD DEVELOPMENT SERIES:
Children's Play
Heredity And Prenatal Environment

COUNSELING ADOLESCENTS SERIES:
Social Development
Counselor's Day
Diagnosis And Planning Adjustments in Counseling
Using Analytical Tools

EDUCATIONAL PSYCHOLOGY SERIES:
Problem Of Pupil Adjustment-The Drop Out
Problem Of Pupil Adjustment-The Stay-In

ELEMENTARY SCHOOL TEACHER EDUCATION SERIES:
Developmental Characteristics Of Pre-Adolescents
Discovering Individual Differences
Each Child Is Different

PLANNING FOR TEACHING SERIES:
Effective Learning In The Elementary School
Guiding The Growth Of Children
Planning For Personal and Professional Growth
Promoting Pupil Adjustment

PSYCHOLOGY SERIES:
Common Fallacies About Group Differences
Controlling Behavior Through Reinforcement
Development Of Individual Differences
Learning Discriminations And Skills

TEACHER EDUCATION SERIES:
Broader Concepts Of Method, Part I
Broader Concepts Of Method, Part II
Learning To Understand Children (Part I-A Diagnostic Approach)
Learning To Understand Children (Part II—A Remedial Program)

MISCELLANEOUS:
Dry Mount Your Teaching Pictures
The Search: Harvard University (Harvard specialists explain how they survey a Community to determine its school status and needs)
The Search: Ohio State University A documentation of the work of Dr. Samuel Renshaw and others in the field of visual perception)
How To Make And Use A Diorama
The Challenge Of The Gifted
The Search: Yale University (Discusses new ideas and new Techniques that help to determine normalcy in children)

TEACHER EDUCATION IN MODERN MATHEMATICS

Concept of Function
Irrational Numbers
Number Fields
Patterns in Mathematics
Sentences and Solution Sets

NATIONAL EDUCATION ASSOCIATION

And Gladly Teach
Crowded Out
How Good Are Our Schools
Right Angle
Schools, Satellites and Survival

TRAVEL FILMS

Abegweit
Bluenose Holiday
Beautiful Bonne Bay
Big White Water
Carnival in Quebec
Fishing In Newfoundland
Highway North
Marine Highway
Montreal
Ottawa—Canada's Capital
Picturesque Gaspe
Road to Keltic
Talented Hands
Waterways Holiday

CORRESPONDENCE INSTRUCTION CATALOGUE

UNIVERSITY OF NORTH CAROLINA
EXTENSION DIVISION
CHAPEL HILL, N. C.

1960-61

ANNOUNCEMENTS OF THE BUREAU OF CORRESPONDENCE INSTRUCTION

VOL. XXXIX NO. 3

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Vol. XXXVII, No. 4	*Lectures in the Humanities,* Thirteenth Series, 1956-1957. (Everett W. Hall, Norval Neil Luxon, Wilton Mason), November, 1957.
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UNIVERSITY OF NORTH CAROLINA
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CORRESPONDENCE INSTRUCTION CATALOGUE

ANNOUNCEMENTS OF THE BUREAU OF
CORRESPONDENCE INSTRUCTION

1960-1961

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Correspondence Instruction

This catalogue explains in detail the correspondence work offered at Chapel Hill by the Extension Division of the University of North Carolina. The courses offered at the State College of Agriculture and Engineering in Raleigh are listed on pages 41-43. Full information regarding them may be secured by writing to that institution.

The courses listed herein may be pursued by anyone who is prepared to study them with profit. Those who expect to secure credit towards a degree must, of course, satisfy the entrance and other requirements. However, those who do not desire or expect such credit are permitted to register for any course in which they have an interest. Non-credit students are given the same careful instruction as those who study for credit.

Each correspondence course has been prepared by a member of the faculty so that it parallels the equivalent course given in residence and covers an equal amount of work for which equal credit is given. Although it may vary, a correspondence course which gives two semester hours' credit usually has sixteen assignments and one which gives three semester hours' credit has twenty-five assignments.

General Information

Correspondence study is a method of learning through the directed study of textbooks and supplementary material, writing the answers to the questions, and developing lines of thought contained in each assignment. Each assignment includes: (a) full directions for study, including references to textbooks; (b) suggestions and lecture material; (c) questions to be answered in writing. When a student registers for a course, he is provided a set of assignments. He does the work outlined in the first assignment and sends his paper to the Bureau of Correspondence Instruction and then begins work on the second assignment. At the University each paper is examined by an instructor, who carefully corrects and grades it and places on it constructive criticism and helpful suggestions for study. During University vacation periods, students may expect some delay in the return of reports. While it is very desirable that the student send in work regularly, at least one assignment each week, he has the privilege of sending it in as he is able to complete it, *provided he does not submit more than four assignments in each course within a seven-day period.* Each assignment covers approximately two days of residence work. An assignment is expected to require approximately six hours for preparation.

Credit

Unless otherwise noted, all courses offered give credit toward bachelors' degrees at this institution. *No courses are offered for graduate credit.*

To work out a systematic plan for taking correspondence instruction toward the A.B. degree, study carefully the *Requirements for Bachelors' Degrees* found on pages 14-15.

The State Department of Public Instruction at Raleigh will, in accordance with its regulations, credit all courses listed in this cata-

logue (except those listed as non-credit courses) toward state teachers' certificates. See pages 16-20 regarding amount of credit allowed and distribution.

For credit toward a degree at this branch of the University, not more than the equivalent of one year of residence work, 30 semester hours, may be earned by extension classes and correspondence courses. One-half of the total amount, 15 semester hours, is the maximum correspondence work that may be completed in any twelve-month period. The last year's work must be taken in residence. A maximum of two courses may be taken by correspondence from this University during the last year.

If degree credit is desired at this branch of the University an applicant for correspondence work must meet the University entrance requirements of at least fifteen acceptable units from an accredited high school. The high school record must be transferred to the University on a blank that will be furnished for the purpose. Credit for work taken at other colleges must be properly transferred to the University and accepted by the examining committee.

Women are eligible to enter the regular session of the University below the junior class only if they are *bona fide* residents of Chapel Hill or apply as candidates for one of the following degrees: B.S. in Pharmacy, or Nursing, or Medical Technology, or Dental Hygiene, or Physical Therapy. All other women must have two years of residence in college before being eligible to enter the University. Part or all of the residence requirements can be met in summer sessions.

Transferring Credit

Credits earned will be transferred to another institution when this request is made by the student.

The University cannot determine the policy of other institutions in regard to accepting credit for correspondence work. There are very few standard colleges or universities at this time, however, that do not accept credit for work completed through correspondence instruction in other standard colleges or universities. There is usually interchange of credits between the various institutions which are members of the National University Extension Association. Persons should confer with the officials of the institution where credit is desired before enrolling.

The Extension Division will transfer credit to State Departments of Education to be applied toward teachers' certificates when requested to do so. The State Department in North Carolina has requested the Division to transfer credit at only two stated times during the year—June 1st and September 1st. Unless the work is completed before September 1st, credit will not be allowed by the State Department until the June next succeeding.

Fees and Refunds

Fees*

Effective January 1, 1960

For residents of North Carolina:	
($10.00 per semester hour)	
2 semester hour course	$20.00
3 semester hour course	$30.00
4 semester hour course	$40.00
For non-residents of North Carolina:	
($15.00 per semester hour)	
2 semester hour course	$30.00
3 semester hour course	$45.00
4 semester hour course	$60.00
Renewal fee (extends course six months beyond the usual thirteen months' time allowed for completion)	$3.00

Under certain circumstances, the Vocational Rehabilitation Division of the State Department of Public Instruction will pay the fees for those who have a physical disability. Full information will be furnished those who write the Director, Raleigh, North Carolina.

Refunds

No course fee or part of such can be refunded after an assignment has been submitted.

Partial refunds will be granted provided the request is made within the first three months of the original enrollment date, and no assignments have been submitted.

Persons must have a legitimate reason for discontinuing a course when requesting a refund.

The United States Armed Forces Institute

The University of North Carolina is one of a number of colleges and universities selected by the United States Government to offer correspondence courses to those in service, the Government paying part of the expense. Military personnel of the United States Army, Air Force, Navy, Coast Guard and Marine Corps, whose applications have been approved are eligible to enroll through the United States Armed Forces Institute. The following subjects are included in the University's approved courses: Art, Business Administration, Education, English, Geography, German, History, Latin, Mathematics, Music, Philosophy, Physical Education, Political Science, Psychology, Religion, Russian, Sociology, and Spanish. A leaflet giving full information is available and will be sent upon request. The Government will pay the tuition, while the person in service pays for the books and a registration fee of $4.00.

Those desiring to enroll under this plan should send to the Director of the Armed Forces Institute, Madison 3, Wisconsin (1) one of the application blanks in the back of the catalogue with (2) a United States Armed Forces Institute application form secured from an Education Officer and (3) a money order, cashier's check or certified check made out

* Cost of textbooks not included. A book list is available upon request.

to the University Extension Division for the student's share of the cost. If the Armed Forces Institute application forms cannot be secured from a post, camp or station commander, they may be obtained from the Institute Headquarters, Madison 3, Wisconsin.

Rules Regarding Loan of Books From the Library

Required textbooks and materials may be secured from the Bureau of Correspondence Instruction.

Books for *supplementary* reading should be requested from the local public or county library. If the local library cannot supply these books, they may be obtained by having the local librarian request them through the Interlibrary Center at the Wilson Library, University of North Carolina, Chapel Hill. Students who live in towns or counties without library service may obtain books by writing directly to the Center. Individuals are charged a fee of 50c for each package plus the cost of postage.

If possible, indicate second and third choice of books.

Books are loaned for a period of four weeks, including transportation time. Upon request, this material may be renewed for another week.

If books are damaged and not returned in good condition, the students to whom they have been loaned will be billed for the cost of books plus a fee for processing, and credit for courses will be withheld until the bill is paid.

Rules Governing Correspondence Courses

1. Not more than two courses may be taken at any one time.

2. Students may enroll in a course at any time during the year.

3. Courses must be completed within thirteen months from the original date of registration or a renewal fee will be required.

4. Students may not enroll while attending a high school, college or university, without securing the written approval of their dean or academic advisor.

5. Students who are not *bona fide* residents of Chapel Hill and are not currently attending the University must secure the written approval of University authorities to remain in the vicinity of Chapel Hill while enrolled in a correspondence course.

6. It is desirable that students send in at least one assignment a week. Only four assignments are accepted in a course in a seven day period. These should be submitted one at a time. They will be returned to the student for study purposes as soon as they are corrected. All written assignments and reports must be returned to the Bureau before a final grade or credit will be given.

7. Students taking courses for credit must pass a final examination taken no later than one month after all assignments have been corrected. Examinations must be taken at a standard college or university which is accessible to the student. Exceptions to this rule are given due consideration when the situation merits it.

8. All assignments and the examination should be completed two weeks prior to the date credit is desired.

9. A subject for which credit has already been given cannot be taken for credit by correspondence unless approval has been obtained from the institution where credit is desired.

10. Thirty semester hours (equivalent to one year of residence work) may be taken by correspondence and extension classes toward a degree at the University in Chapel Hill. One-half of this amount (fifteen semester hours) is the maximum correspondence work allowed to be completed in any twelve month period.

11. If a student, with the exception of one or two courses, has fulfilled the University requirement of taking the full work of the last academic year in residence, he may complete this work by correspondence provided permission is secured from his dean, and suitable courses are offered.

12. The use of lightweight paper for assignments is recommended in order to save postage. Paper suitable for typewriter or pen, if not available locally, may be purchased from the Bureau.

Standards

The Bureau emphasizes the importance of the individual guidance of students by instructors. This involves the evaluation of students' work and the giving of helpful suggestions according to individual needs.

All students will be expected to submit their assignments in good form, grammatical and otherwise, acceptable to the instructor and in line with the requirements of the University. If an instructor in any department finds that the English composition of a student is below the standard, the symbol cc (composition condition) may accompany the final grade, as for instance Bcc, Ccc, or Dcc. This will indicate that, although the instructor has accepted as satisfactory the student's knowledge of the subject matter of the course, the penmanship, punctuation, spelling, vocabulary, or organization of the written work is not up to the University standard. A student receiving such a grade may remove the condition by completing successfully the correspondence course English c0.

The Honor System

Correspondence courses, like residence courses, are on the honor basis. The student body of the University has through a century of tradition developed an honor spirit and an honor system. A student who plagiarizes, copies, cheats, or in any way does dishonest work is not only denied credit for the course but is also dismissed from the University by his fellow students. Work must be honest above all other qualities. Each correspondence student is on his honor to do only honest work.

To make certain that there is no semblance of dishonor it should be an unfailing habit *never* to refer to the textbook or any other materials or aids when writing answers to questions, unless specifically advised to do so.

No credit will be given for a course in case the student has been false to the pledge of honor. No refund will be made in such a case.

Requirements for Bachelor's Degree

The matter below, taken from the University Catalogue, is inserted so that correspondence students may select their courses in line with the requirements for the degree of Bachelor of Arts, should they desire to do so. The course leading to this degree is designed to provide a general, well rounded, liberal education. The amount of correspondence work accepted for degree credit is explained on page 10.

Those interested in other bachelor's degrees should be guided by the University Catalogue. The University Catalogue should be consulted for information regarding grade averages and other requirements for graduation.

In order to be recommended for the degree a student must pass satisfactorily and in accordance with the qualitative standard in force the work prescribed for the lower division and at least sixty (60) semester hours in the upper division, including the prescribed subjects listed below and elective subjects in accordance with the requirements stated.

In his first two years the student pursues a more or less definite curriculum, according to the following plan:

BACHELOR OF ARTS

Freshman Year

Required:
- *English 1-2
- *Social Science 1-2
- *Hygiene 11
- Physical Education 1, 2

Choose two courses:
- Astronomy 31
- Chemistry 11-12 or 11-21
- Geology 1 or *41, *42
- Geography 38
- Physics 20, 24, 25
- Botany 1, Zoology 1

Choose one sequence:
- Mathematics *7-*8 or 11-12 or 15-16
- **Greek 3-4 (or 1-2)
- **Latin *3-4 (or 1-2)

Choose one sequence:
- †French 3-4
- †German *3-*4
- †Greek 3-4
- †Latin *3-4
- †Spanish 3-4
- †Russian *1-2

Sophomore Year

English *21

Foreign Language: Course 21 in the language begun in the freshman year.

Social Sciences: One course chosen from the social science courses included in the list of sophomore electives below.

Natural Science or Mathematics: One course in natural science or one course in Mathematics *31 or *32 or its equivalent. These with the freshman courses in science must include one course in a physical science (astronomy, chemistry, physics, geology, geography) and at least one course in a biological science (bacteriology, botany, zoology, psychology).

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* Offered by correspondence.

** Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not have classics in high school.

† Students may meet the requirement with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college. A student who has an entrance deficiency in foreign language should not take Russian.

Selections may be made from the natural science courses included in the list of sophomore electives given below.
Electives: Six courses from the list of sophomore electives given below.
Physical Education 3, 4.

Sophomore Electives

Courses in bold face type will carry upper college credit for a restricted student provided they fit into the pattern of his degree requirements.

Anthropology	*41
Art	31, 32, *33, 44, 46, 48, 65
Astronomy	31, 32
Botany	1, **41, 42, 43**
Chemistry	11-12 or 11-21, **43, 44**
Classics	Greek 1-2, 3, 4, 21, 22
	Latin 1-2, *3, 4, *21, *22, **51, 52, 53**
	Classics 31, 32 (courses in English translation)
Dramatic Art	30
Economics	30, 31-32
Education	**41**
English	***22**, 23, 26
Geology	1 or *41, *42
Geography	38, 48
German	*1-*2, 1L-2L, *3, *4, *21, *22, 31, 32
History	*21, *22, ***41, *42, *44, *45, 46, 47, 48, 49**
Journalism	**53**
Mathematics	*31, ***32, *33, 34, 35, 36**, 41, 51, **62**
Music	14-15, 31-32, 44-45, 41, 55, 56
Philosophy	*21, 22, 41, 42
Physical Education	**77**
Physics	20, 24, 25
Political Science	*41, **42**, ***51**, **52**
Psychology	26, 27, 28
Radio	**45**
Religion	*28, 30, **31, 45**
Romance Languages	French 1-2, 3, 4, 14, 15, 21, 22, **50, 51, 52**
	NOTE: 21 is to count as elective only when General College language requirements are met by 1-2, 3, 4.
	Spanish 1-2, 3, 4, 14, 15, 21, 22, **50, 51, 52**
	NOTE: 21 is to count as elective only when General College language requirements are met by 1-2, 3, 4.
Russian	*1-2, 3, 4
Sociology	*51, *52, **Rural Sociology 53**
Zoology	11, 41, 42

* Given by correspondence.

Special Notices to Teachers in North Carolina

Teachers who need *professional courses* must be sure to choose them in their own professional field. For instance, a primary teacher should not take a course in high school methods.

For renewing a certificate based on a bachelor's degree six semester hours' work is required and may be taken by correspondence and/or extension class. Any courses which do not duplicate courses previously taken will be suitable. Certificates based on more advanced degrees may not be renewed by correspondence.

The following regulations have been adopted by the State Department of Public Instruction:

1. No teacher in service shall be given credit for more than twenty semester hours during any one year between September 1st of that year and August 31st of the following year, a teacher in service being defined as one who teaches six or more months during the period. This, it must be understood, is the maximum total credit from all sources.

2. Not more than forty per cent of the credit necessary to raise a certificate from one class to another may be earned through extension class teaching and/or correspondence study instruction.

3. The original professional credit necessary for an administrative or supervisory certificate may not be secured through extension class teaching and/or correspondence study instruction. The requirements for Graduate Secondary and Elementary Certificates, issued on the basis of a master's degree, may not be met by correspondence study.

4. Not more than sixteen semester hours' extension credit may be earned with the same instructor.

For High School Teachers' Certificates

The requirements for A Certificates, as outlined by the North Carolina Department of Public Instruction, are as follows:

The minimum scholastic training represents graduation from a standard four-year college. The subject, or subjects, for which certification is granted appear on the face of the certificate. It is desirable that one be qualified to teach two or more subjects.

This summary of requirements is expressed in terms of professional requirements and academic requirements.

I. Professional Requirements ..... 18 Semester Hours
   a. The Pupil 6
   b. The School 6
   c. Teaching and Practicum 6*

   (Correspondence courses available in these areas are indicated under the School of Education.)

II. Academic requirements vary with the subject for which certification is granted. In terms of semester hours, the minimum subject matter credit for the teaching of each of the various subjects is as follows:

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* Must include at least 45 clock hours of actual teaching.

1. *Art* 30
   Design (industrial, interior, costume) 9
   Drawing and Painting 9
   Ceramics and/or Sculpture.. 3
   Art History 6

2. *Bible and Religion* 21
   Old Testament 6
   New Testament 6
   Electives 9

3. *Commerce* 36
   Economics and Retailing 12-15
   Accounting and Management (including Office Management) 12-15
   Office Skills (shorthand, and Minimum office experience Certificate may be granted transcription, and typing.....12 in the individual areas as follows:
   Typewriting 4
   Stenography 11-13
      Stenography, including transcription 9
      Typing 2-4
   Bookkeeping 15
      Accounting and Management
   Basic Business 24
      Economics 12
      Management and Accounting 12

4. *Distributive Education* 36
   This shall include:
      Economics 6-9
      Retailing (such as) 9-12
      Introduction to Retailing
      Store Organization
      Retail Advertising
      Textiles
      Merchandise Information and Salesmanship
      Accounting and Management 6-12
   Related Distributive Education and Commerce .....12-18 to be selected from:
      Art, Design, Commercial Art, Speech, Public Speaking, Economic Geography, Business Surveys or Analysis, Business (law, mathematics, typewriting, English and organization or principles)
   Minimum Business Experience—
      Exceptional experience above the minimum required may be substituted for not more than the 12 semester hours in the required subjects. A maximum of one full year's experience shall be required for each 6 semester hours for which substitution be made.

5. *English* 30
   Required:
      Shakespeare 3
      American Literature 3
      Advanced Grammar and Composition 3
      Recommended from—
         Speech 3
         English or American Literature 6
         Teaching of Reading 3
         Young People's Literature 3

6. *French* 24-30
   (24 semester hours based upon two or more high school units; otherwise 30 semester hours)
   Spoken Language 6
   Quantitative requirements for teaching other modern foreign languages same as for French.

7. *Health Education* 24
   1. The Individual 9-12
      a. Personal Health 3
      b. Mental Health 3
         (a. and b. may be combined)
      c. First Aid and Safety .. 3
   2. Community and School 9-12
      a. Principles of Public Health 6
      b. Environmental Health 3
      c. Healthful Family Living 3
         (a. and b. may be combined)
   3. Organization and Adm. of School Community Health 3-6

8. *Home Economics* 51
   a. Chemistry 6
   b. Biology 6
   c. Physics 2
   d. Art 3
   e. Foods 8
   f. Clothing 8
   g. Management 6
      Home Management Residence required (six weeks recommended as a minimum). Other courses may include buying, furnishing and housing.

h. Family 6
Child Development (required)
Family Relationships (required)
Other courses may include Health, Nursing and Hygiene.
i. Social Science 6

9. *Industrial Arts* 30
a. Drawing and Design 6
b. Woodwork (such as bench work, machine work, carpentry cabinet making).... 6
c. General Metal Work (including three or more of the following areas: cold metal, sheet metal, forging, foundry, machine shop, art metal, welding 6
d. General Electricity (such as principles, house wiring, common appliances, and radio) 4
e. General Shop 2
f. Electives from a, b, c, d, or from such other courses as graphic arts, (printing, silk screen, photography) ceramics, automotives, aeronautics, crafts, (jewelry, leather) 6

10. *Latin* 24
Based on two units of High School Latin, to be reduced six semester hours for each addi-

11. *Library Science* 18
This shall include:
Administration and Organization of the School Library 3
Reference Books and their use 3
Book Selection for Children 2
Book Selection for Young People 2
Simplified Classification and Cataloging 3

12. *Mathematics* 21
Required—
College Algebra 3
Trigonometry 3
Analytic Geometry 3
Recommended from—
Differential and Integral Calculus 6
History of Mathematics 3
Mechanical Drawing 3
Surveying 3
Applications of Mathematics to science, engineering, commerce and industry 3
Statistics 3
Consumer Mathematics 3
College Physics 3
Navigation 3
Astronomy 3

13. *Music Education*—
General 36
a. Applied Music 18
Piano 6
Voice 6
(At least one-half the voice credit shall be voice training)
b. Theory of Music 12
(Harmony, form, ear-training)
c. History and Appreciation of Music 6
Music Education:—Instrumental 36
a. Applied Music 21
Major Instrument 6-12
At least two minor instruments (piano advised to be one; voice permitted as one) 9-15
b. Theory of Music (harmony, form, ear-training 9
c. History and appreciation of Music 6

14. *Health and Physical Education:—Whole Time* 36
I. Area of Principles, Organization, Administration and Supervision 6-10
a. Principles of Health Education
b. Principles of Physical Education
(a. and b. may be combined)
c. Organization and Administration of Health and Physical Education
d. Evaluation and measurements in health and physical education
e. Curriculum in Physical Education
At least four areas must be included in this requirement
II. Area of Applied Techniques 10-12
a. Methods and materials in Group Games of Low Organization
b. Methods and materials

in individual Sports (Tennis, Golf, Wrestling, etc.)
c. Methods and materials in Aquatics
d. Methods and materials in Rhythms
e. Methods and materials in Tumbling-Stunts
f. Methods and materials in Team Sports (Touch Football, Soccer, Speedball, Volleyball, etc.)
g. Methods and materials in team sports
(1) Football
(2) Basketball
(3) Baseball
(4) Track
At least five areas must be included in this requirement.

III. Area of Individual Physical Education 4-6
a. Individual Physical Education (may include Kinesiology)

IV. Area of Health Education 4-6
a. First Aid-Safety-Athletic Injuries
b. Problems in Health Education

V. Anatomy and Physiology 6

VI. Biological Science 6

tional unit of entrance credit.

Part-time Teacher of Physical and Health Education and Coaches of Athletic Teams....15

This shall include:
1. Principles, organization, administration, and supervision of Physical Education and Health 3-4
2. Physical Education skills and applied techniques (1) 8-9
a. Group games of low organization (games adaptable to adult groups and to children of elementary age)
b. Dual and single games (tennis, handball, golf, badminton, track, and field events, etc.)
c. Group games of high organization (football, soccer, rugby, basketball, baseball, volleyball, speedball, lacrosse, field hockey, etc.)
d. Rhythms and dances
e. Gymnastics and stunts
f. Aquatics
3. Health Education, including the teaching of Health and school health problems 3-4

15. *Science* 30
a. Biology 6
b. Chemistry 6
c. Physics 6
d. Geography or Geology..... 3
e. Electives from a, b, c, or d 9

Individual certification will be granted in any of the specific areas a, b, c, or d, in which 12 semester hours credit is presented. Certification for the subject of General Science will require credit for 18 semester hours from three of the four areas a, b, c, and d.

16. *Social Studies* 30
a. European History or World History 6
b. American History 6
c. From Government, Geography, Economics, or Sociology 12
d. Electives from any of above 6

Individual certification will be granted in any of the specific areas:—History, Government, Geography, Economics and Sociology, in which 12 semester hours credit is presented. Certification for Citizenship or Civics, or Problems in American Democracy would require credit for at least 18 semester hours from Government, Economics and Sociology.

Agriculture:

B.S. Degree in Agriculture Education, including professional credits required for teachers of other high school subjects.

For Grammar Grade or Primary Certificates

CLASS A

These are certificates required of elementary teachers. They require a degree from a standard four-year college. As a part of the work, or in addition to it, the applicant shall have:

1. English
   English Required for Degree
   Children's Literature 2
   Recommended:
   Advanced Grammar and Composition 3
   Speech 3
2. American History 6
   Government 2-3
3. Geography 6
   (Principles and Regional recommended)
4. Art 6
   Music 6
5. Health and Physical Education 6
   This would include:
   Principles, Practices and Procedures in Physical Education for Elementary Schools 2
   Principles, Practices and Procedures in Health for Elementary Schools 2
6. Education 18
   a. The Pupil 6
   b. The School 6
   c. Teaching and Practicum..... *6
   (Correspondence courses available in these areas are indicated under the Department of Education.)

NOTE: The overall specific requirements are the same for the Primary and Grammar Grade A Certificates. In certain areas, however, particularly in Education, it is expected that there would be slightly different emphases for the two groups.

Adult Education

Special arrangements will be made with instructors to meet the requirements of adult students who, for various reasons, desire to continue studying. Any mature person or group of persons, regardless of previous education, may register for any of the subjects listed in this bulletin, and the instructor will endeavor to adjust the course to the individual needs and interests. Courses in Philosophy, Psychology, Education, Religion and Sociology are especially recommended for homemakers, social workers, parents and teachers. Literary and civic club members will find courses in History, English, Political Science, foreign language, Art and Music valuable. For those in business there are courses in Business English, Business Law, Mathematics, etc.

How to Select and Register for Correspondence Work

Read carefully all the preceding pages. Look through the list of courses and select one or two which you need or in which you are most interested. Confer with officials of the institution where credit is desired regarding the selection of your work, if necessary. Fill out the application blank in the back of this bulletin. Detach and mail it with a check or money order to the Bureau of Correspondence Instruction, Chapel Hill, N. C. The check or money order should be made payable to the Bureau of Correspondence Instruction.

Before writing to the Bureau be sure to fill out *every line* of the application blank. If you are a school teacher, be certain to give exact information concerning your teacher's certificate: i.e., *kind* (whether elementary, primary, grammar grade, or high school); *class* (whether A, B, or C); and *number*.

Textbooks will not be sent unless requested on the application blank. Those wishing to purchase texts should send an amount sufficient to cover their cost or request that they be sent C.O.D.

* Must include at least 45 clock hours of actual teaching.

COURSES OF INSTRUCTION

NOTE: The "c" numbers are the same as in the University catalogue. For the complete understanding of a course, both the "a" and "b" parts should be taken. For degree credit both parts are required.

NOTE: The fees here listed apply to residents of North Carolina. Fees for non-residents are $30.00 for a course carrying two semester hours' credit and $45.00 for a course carrying three semester hours' credit. See page 11.

DEPARTMENT OF ART

c33.

HISTORY AND INTERPRETATION OF PAINTING. — Credit, 3 semester hrs.
Dr. Sommer, or Assistant. — Fee, $30.00.
25 assignments.

An introduction to the history and interpretation of art, tracing the development of painting in Western Civilization through the Renaissance.

c41.

THE HISTORY AND APPRECIATION OF ANCIENT AND MEDIEVAL ART. — Credit, 2 semester hrs.
Mrs. Keeler. — Fee, $20.00.
16 assignments.

A survey of the architecture, sculpture, and painting from the beginnings of art through the Gothic period.

SCHOOL OF BUSINESS ADMINISTRATION

c71.

ACCOUNTING PRINCIPLES I. — Credit, 3 semester hrs.
Professor Langenderfer. — Fee, $30.00.
25 assignments.

Fundamental Accounting Principles applied to the recording of business activities and to the reporting of the financial results for single proprietorships, partnerships, and corporations.

c91.

BUSINESS LAW. — Credit, 3 semester hrs.
Professor Hobbs. — Fee, $30.00.
Prerequisites, Economics 31-32 if taken for credit. — *25 assignments.*

The purpose of this course is to give the student an understanding of the main principles of law which govern the daily conduct of business. Contracts and agency are given special attention.

c194. (Formerly c92)

BUSINESS LAW. — Credit, 3 semester hrs.
Professor Hobbs. — Fee, $30.00.
Prerequisite, Business Administration c91 or equivalent. — *25 assignments.*

The law of negotiable instruments and the legal principles governing sales including conditional sales and other security transactions are covered. Corporations, partnerships, suretyships and mortgages are also considered.

Allied Subjects

c32.

BUSINESS ENGLISH.

(See description of this course listed under Department of English.)

DEPARTMENT OF COMPARATIVE LITERATURE

c162. MODERN CONTINENTAL DRAMA.
(See description of this course listed under Department of Dramatic Art.)

SCHOOL OF DENTISTRY

cn1. THE DENTAL ASSISTANT. Non-credit.
Professor Brauer and Faculty. *25 assignments.*
Fee, $50.00.

This course is designed for the person who already is a Dental Assistant, or who desires to become a Dental Assistant. It is patterned from the recommended curriculum of the American Dental Assistants' Association and has been accepted by that Association as meeting one of the requirements for taking the examination of the American Dental Assistants' Association.

DEPARTMENT OF DRAMATIC ART

*c155. PLAYWRITING. Credit, 3 semester hrs.
Professor Patterson. Fee, $30.00.
Professor Parker. *25 assignments.*

A practical course in the writing of the stage play. A study of the principles of dramatic construction based on consideration of the sources of dramatic literature. Requirements include the writing of a short play based on a scenario or story from a selected group, and the writing of an original one-act play (or a portion of a full-length play corresponding in length, accompanied by a scenario of the entire work). Both plays will be written under the guidance of the instructor, with criticisms and suggestions from inception to final form.

c162. MODERN CONTINENTAL DRAMA. Credit, 3 semester hrs.
Professor Graves. Fee, $30.00.
25 assignments.

A study of representative plays of the modern period from Ibsen to Giraudoux.

SCHOOL OF EDUCATION

(The area of the subject is indicated in accordance with the State Department of Public Instruction of N.C. See page 16.)

c71. (The Pupil)
EDUCATIONAL PSYCHOLOGY. Credit, 3 semester hrs.
Professor Sommerfeld. Fee, $30.00.
25 assignments.

Designed to provide teachers and prospective teachers with those psychological skills and insights which are necessary to successfully guide the growing, learning, and adjustments of children. Considers such topics as: the nature of the learner; the nature of learning and factors which influence school learning; nature of individual differences; mental hygiene; and evaluation.

* Not available before June 1960.

c93. SURVEY AND EVALUATION OF BOOKS AND RELATED MATERIALS FOR CHILDREN. Credit, 3 semester hrs. Fee, $30.00. *25 assignments.*
Miss Allman.

This course is designed to acquaint students with the field of children's literature so that they may make use of its wide variety of materials in their work with children. The development of ability to know, select and present literature to children in the first through the eighth grades.

c94. THE TEACHER AND ORGANIZATION FOR EFFECTIVE TEACHING. Credit, 3 semester hrs. Fee, $30.00. *25 assignments.*
Professor Fountain.

This course is designed for classroom teachers and attempts to show how organization in the classroom and school environment can be made to contribute best to learning. It is especially designed for teachers in the elementary schools but since problems of management of the class and materials of instruction are common to any kind of class, secondary school teachers could profitably enroll in it.

c98a-c98b. (The School) THE TEACHER AND SCHOOL ADMINISTRATION. Credit, 2 semester hrs. each. Fee, $20.00 each. *16 assignments each.*
Professor Fountain.

The general purpose of this course is to give the teacher an understanding of the scope and general character of the public school system, of its organization and the administrative units and agencies through which it is managed, and those administrative problems in which the classroom teacher may be expected to participate.

c99. (The School) THE SECONDARY SCHOOL. Credit, 3 semester hrs. Fee, $30.00. *25 assignments.*
Professor Tarbet.

This course emphasizes the purposes and practices of the modern secondary school in providing for the education of the adolescent boy or girl. This includes a study of the purposes and objectives, the curriculum, including co-curricular activities, the guidance services, and stresses issues and trends in secondary education.

c103a. ELEMENTS OF STATISTICAL METHODS IN EDUCATION. Credit, 2 semester hrs. Fee, $20.00. *15 assignments.*
Professor Sommerfeld.

This course provides the statistical training necessary for understanding the reports of modern educational investigations and for interpreting simple research projects.

c130. (The School) PRINCIPLES AND METHODS IN ADULT EDUCATION. Credit, 3 semester hrs. Fee, $30.00. *25 assignments.*
Professor Fountain.

Consideration will be given in this course to (1) principles in organizing adult study groups; (2) how adults learn; (3) guidance and counselling of adults; (4) preparing curriculum materials for adult groups; and (5) teaching and learning methods and techniques in adult education.

c142a-c142b.
HISTORIC FOUNDATIONS OF MODERN EDUCATION.
Mr. Hill.

Credit, 2 semester hrs. each.
Fee, $20.00 each.
15 assignments each.

This course traces the development of some of the more important educational problems of modern times as they have been affected by the social and political facts of history, by the contributions of the leading educational theorists and by institutional practice.

c143a-c143b. (The School)
SOCIAL AND EDUCATIONAL HISTORY OF THE UNITED STATES.
Mr. Hill.

Credit, 2 semester hrs. each.
Fee, $20.00 each.
16 assignments each.

The purpose of this course is to present the evolution of the educational practices and institutions of the United States. These will be traced through: (a) the period of transplanting of European institutions; (b) the period of modification of institutional life to meet new conditions; and (c) the period of development of an educational system of free schools in harmony with the political and social ideals and institutions of America.
Note: This course is accepted as the equivalent of History 170.

c144. (The School)
COMMUNITY EDUCATION.
Mr. Batten.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

The theories and practices in community education are considered in this course. Students are asked to become familiar with aspects of community life and to find out what has been done in various communities to improve them and in various schools to use them in connection with the school curriculum and to induct students into participation in democratic citizenship. The preparation of teachers for leadership in community education is stressed.

c152a. (Teaching and Practicum)
THE LANGUAGE ARTS IN THE ELEMENTARY SCHOOL.
Mrs. Curtright.

Credit, 2 semester hrs.
Fee, $20.00.
17 assignments.

This course aims to have pupils recall and use their experiences in activities such as conversation, story telling, dramatics, choral speech, broadcasting and discussion to improve their oral communication. Activities such as the creative writing of poems, stories, plays, themes and letters to develop the pupil's written expression are important phases of the course. Voice and speech development, the enrichment of the child's experiences, vocabulary and expression through the use of selected literature and improved methods of teaching the tools of language, such as grammar, spelling and handwriting receive adequate attention.

c152b. (Teaching and Practicum)
READING AND STUDY HABITS FOR THE ELEMENTARY GRADES.
Mrs. Curtright.

Credit, 2 semester hrs.
Fee, $20.00.
16 assignments.

This course considers the place of reading and study in the school program, the way teachers may provide for the maximum development of each pupil through making available desirable reading material and the remedial measures needed to meet reading and study difficulties.

c155. (Teaching and Practicum)
THE TEACHING OF SCIENCE IN THE ELEMENTARY GRADES.
Mr. Batten.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

The informational content of science is studied in relation to science instruction in the elementary school. Purposes, methods, and materials for such instruction are surveyed. Stress is laid on making the best use of common things at hand, in demonstrating and experimenting.

c156. (Teaching and Practicum)
THE TEACHING OF ARITHMETIC IN THE ELEMENTARY SCHOOL.
Mrs. Garner.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This course deals with the organization and selection of subject matter in arithmetic with modern methods of teaching the subject in the elementary school.

c160. (The School)
CURRICULUM CONSTRUCTION.
Mr. Stone.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

The general principles and techniques of curriculum construction on both elementary and secondary school levels comprise the major part of the course. Special attention will be focused upon recent trends in curriculum revision and organization in modern schools.

*c171a-c171b. (The Pupil)
GROWTH AND DEVELOPMENT OF THE SCHOOL CHILD.
Professor Scott.

Credit, 2 semester hrs. each.
Fee, $20.00 each.
16 assignments in c171a.
17 assignments in c171b.

(a) Child development. A study of the growth and development of children up to the time of adolescence. Changes in emotions are emphasized as well as those of intellect. (b) Adolescence. A study of the changes in emotions, attitudes and interests which take place during the adolescent years.

c197.
SOCIAL POLICY AND EDUCATION. (The individual and social development of pupils.)
Professor Fountain.

Credit, 2 semester hrs.
Fee, $20.00.
16 assignments.

This course deals with the needs and problems of socialization and social progress from the standpoint of education. It attempts to define a social policy for education based fundamentally on democratic principles and discusses the vital educational issues involved in that policy.

* A three semester hour course in this subject will be available after September, 1960.

DEPARTMENT OF ENGLISH

c0.

ENGLISH COMPOSITION. Non-credit (see description).
Mrs. Harper. Fee, $30.00.
25 assignments.

This course is offered for all students who fail to qualify for English 1. To students completing this course with grades of A or B, credit for English 1 will be allowed. Students may remove composition conditions by passing this course.

c1.

ENGLISH COMPOSITION AND RHETORIC. Credit, 3 semester hrs.
Mrs. Harper. Fee, $30.00.
25 assignments.

This course has for its object the mastery of the sentence and the relation of sentence structure to paragraph structure.

c2.

ENGLISH COMPOSITION AND RHETORIC. Credit, 3 semester hrs.
Mrs. Harper. Fee, $30.00.
25 assignments.

The purpose of English c2 is to develop fluency and effectiveness in writing. The four basic kinds of discourse and elementary matters of style will be studied. The emphasis of the course is upon the writing of themes although readings from the text will be analyzed.

c21.

ENGLISH LITERATURE (Sophomore). Credit, 3 semester hrs.
Professor Barnes. Fee, $30.00.
25 assignments.

This course is an introduction to English literature through the study of representative works of Chaucer, Shakespeare, and Milton.

c22.

ENGLISH LITERATURE (Sophomore). Credit, 3 semester hrs.
Professor Harper. Fee, $30.00.
25 assignments.

A survey of English literary masterpieces of the 18th and 19th centuries from Swift through Arnold.

c32a.

BUSINESS ENGLISH. Credit, 2 semester hrs.
Mr. Sanders. Fee. $20.00.
17 assignments.

This course is similar to English c32.
Students should not take both courses.

c32.

BUSINESS ENGLISH. Credit, 3 semester hrs.
Mr. Sanders. Fee, $30.00.
25 assignments.

A course in the vocabulary, forms and literature of the business profession with special attention to letters of application and inquiry; routine, collection, adjustment and sales letters, business reports, and technical articles. Specimen letters are studied and criticized and actual business problems solved through written work.

c34a.

INTRODUCTION TO THE SHORT STORY. Credit, 2 semester hrs.
Mr. Greet. Fee, $20.00.
17 assignments.

An analysis of numerous short story materials and techniques. Introductory to English c34.

c34.

CREATIVE WRITING: AN ANALYSIS OF FICTION.
Mr. Greet.

Credit, 3 semester hrs.
Fee, $30.00 plus critical analysis fee, $5.00.
25 assignments.

A composition course designed primarily to offer students an opportunity for short story analysis and the writing of four stories. The work of various well-known authors will be studied. There is also study in the field of general literary principles.

NOTE: Those who have not had a course equivalent to English c34a are advised to take that course first. Applicants for this course who have not had English c34a and do not want to take it should send to the Bureau, for the instructor's consideration, a sample manuscript of their work and a fee of $1.00.

c35.

CREATIVE WRITING: THE SHORT STORY (Advanced).
Prerequisite, English c34, or the equivalent.
Mr. Eaton.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

The major aim of this course is to discover and develop the creative writing abilities of students in the planning and preparing of short stories.

c43.

THE ENGLISH NOVEL.
Professor Barnes.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This is a course in the development of the English novel, particularly in the eighteenth and nineteenth centuries. Special attention is given to the works of Jane Austen, Scott, Dickens, Thackeray, and George Eliot.

c58.

SHAKESPEARE.
Professor Hardison.
Sophomore, junior, and senior elective.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

A study of Shakespeare's plays. About twenty representative comedies, tragedies and histories will be studied.

c72.

ENGLISH LITERATURE, 1780-1830.
Professor Harper.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

A course in the literature of the English Romantic Period, the purpose of which is to acquaint the student with the best thought and feeling of the time. Special attention is given to the greater poets: Coleridge, Wordsworth, Scott, Byron, Shelley, and Keats.

c81.

AMERICAN LITERATURE.
Professor Adams.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This course concerns a study of the Colonial and Revolutionary periods and of the early 19th century through Poe, Hawthorne and Melville.

DEPARTMENT OF GEOLOGY AND GEOGRAPHY

Geology

c41, c42.

INTRODUCTION TO GENERAL GEOLOGY.
Professor Wheeler.
Sophomore, junior, and senior electives.

Credit, 4 semester hrs. each.
*Fee, $40.00 each.
Lab. Fee, $1.00 each.
30 assignments each.

c41. Physical Geology. Nature and origin of minerals and rocks, volcanoes, earthquakes, interior of the earth, origin of mountains, soil development, subsurface water, coastal features, evolution of landscape, effects of glaciers, streams, and wind.
c42. Historical Geology. Prerequisite, Geology c41. A broad study of the geological history of the earth and its inhabitants, as revealed chiefly in earth records. A scientific and cultural course. Laboratory materials used in these courses will be furnished by the Extension Division.

Geography

c15a-c15b.

PRINCIPLES OF GEOGRAPHY.
Professor Basile, or Assistant.

Credit, 2 semester hrs. each.
Fee, $20.00 each.
16 assignments each.

This is an introductory course in college geography in which the interrelationship of man and his geographic environment are studied.

c31.

INTRODUCTION TO GEOGRAPHY.
Professor Basile, or Assistant.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This course is a study of the principles underlying the climate, relief, native vegetation, soils, and distribution of minerals and metals of the world.

c157.

GEOGRAPHY OF NORTH AMERICA.
Professor Basile, or Assistant.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This course comprises a regional study of North America with emphasis on the portion occupied by English-speaking peoples. A brief introduction to the continent as a whole, with emphasis on climate, terrain, and natural resources as fundamental bases of the present geographic pattern, is followed by a study of each of the several regions in light of its own geographic conditions and its place in the whole geographic pattern. A detailed study of Southeastern United States climaxes the course.

* The fee for out-of-state students is $60.00 each.

DEPARTMENT OF GERMANIC LANGUAGES
German

NOTE: The German Department will accept no more than six semester hours' credit of German by correspondence for fulfilling the language requirement. However, all work taken by correspondence beyond the language requirement will be acceptable for credit by the Department.

c1.

ELEMENTARY GERMAN.
Professor Reichert.

Credit, 3 semester hrs.
Fee, $30.00.
Records, $7.50.
25 assignments.

A basic course which seeks to develop reading skill by teaching both the principles of grammar and oral reading fluency (pronunciation and intonation). Tape recordings of the reading material in the course suitable for any machine are available on request, for approximately $5.00. Records (33⅓ r.p.m.) are also available. The use of the tape recordings or the records is required.

c2.

ELEMENTARY GERMAN.
Professor Reichert.
Prerequisite, German 1 or the equivalent.

Credit, 3 semester hrs.
Fee, $30.00.
Records, $7.50.
25 assignments.

This is a secondary course in which reading skill is further developed and the principles of grammar briefly reviewed. From the first readings in simplified German the student is gradually led to the superb style of the Austrian writer, Arthur Schnitzler. The use of records (33⅓ r.p.m.) is required.

c3-c4.

INTERMEDIATE GERMAN.
Professor Reichert.
Prerequisite, German 1-2 or the equivalent.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

These courses are designed to develop speed and accuracy in reading German, and to acquaint the student with some of Germany's outstanding prose writers. German c3 entails in addition to the reading a thorough grammar review. German c4 includes works by Eichendorff, Hesse, and Mann, and introduces an easier work by Kästner for sight reading.

c21-c22.

GERMAN LITERATURE.
Professor Reichert.
Prerequisite, German 1-2-3-4 or equivalent.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

These courses have as their purpose to develop in the student a capacity to read classical German and to familiarize him with German literature in its broad outlines as well as more directly with some of its masterpieces. German c21 surveys German literature from its beginnings to Lessing and Schiller, with readings from Schiller's ballads and plays. German c22 is a study of Classicism and Romanticism, with readings from Goethe, Grillparzer, and Kleist.

c24.

SCIENTIFIC GERMAN.
Professor Reichert.
Prerequisite, German 1-2-3-4 or equivalent.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

The aim of this course is to develop skill in reading German in the special field in which the student is interested. These fields are (1) chemistry, (2) medicine, biology, zoology, and (3) physics, mathematics. When enrolling, the student should indicate in which field he wishes to study. Others than undergraduates will find the course valuable in that it will aid persons in preparing for the language examinations required for an advanced degree. The course is open to those who have completed the equivalent of four courses in German and have a basic knowledge of German vocabulary and grammar. It is so designed as to enable persons who have not studied German recently to refresh their knowledge of basic principles of grammar.

Russian

c1.

ELEMENTARY RUSSIAN.
Professor Arndt.

Credit, 3 semester hrs.
Fee, $30.00.
Records, $7.50.
25 assignments.

Introductory course designed to lay foundation of grammar and to convey basic reading and pronunciation skills. The use of records (33⅓ r.p.m.) is required.

DEPARTMENT OF HISTORY

c1.

FRESHMAN SOCIAL SCIENCE.
Professor Godfrey.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This is an historical study of the institutions of western civilization, designed to promote an understanding of the social, political, and economic aspects of the modern world.

c2.

FRESHMAN SOCIAL SCIENCE.
Professor Godfrey.

Credit, 3 semester hrs.
Fee, $30.00.
26 assignments.

This is a continuation of Social Science c1, to be taken only by those who have had that course or the equivalent.

c21, c22.

AMERICAN HISTORY.
Professor Lefler.
Sophomore elective.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

A general survey of the history of the United States. The first course begins with Columbus' discovery of America and goes to the end of the Civil War; the second begins at this point and ends in 1949. (Both American History sequences, c21-c22 and c71-c72, should not be taken.)

c21, c22, c23.
AMERICAN HISTORY.
Professor Lefler.
Sophomore elective.

Credit, 2 semester hrs. each.
Fee, $20.00 each
18 assignments each.

A general survey of the history of the United States. The first course carries the story from Columbus' discovery of America to about 1823, the second from this point to 1897, and the third covers approximately the last five decades.

NOTE: Those desiring degree credit at the University should take History c21, c22 (3 semester hrs. each) instead of these courses Those who have had any part of the three course arrangement previously given as History 21, 22, 23 (2 semester hrs. each) may secure the remaining work by correspondence.

c41.
ANCIENT HISTORY.
Mr. Hill.
Sophomore, junior and senior elective.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

A course dealing with the history of the Orient, Greece, and Rome to the time of Constantine. Particular attention will be paid to social and economic conditions, and cultural and religious developments.

c42.
MEDIEVAL HISTORY.
Mr. Hill.
Sophomore, junior and senior elective.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This course deals with the history of Western European civilization during the Middle Ages (300-1500). Special emphasis is given to the economic-social and cultural developments during the late Roman Empire, the so-called "Dark Ages," the age of the Crusades and the Renaissance.

c44, c45.
ENGLISH HISTORY.
Professor Godfrey.
Sophomore elective.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

History c44 is a survey of English history from the earliest times to 1714, while History c45 covers the period from then until 1954.

c71, c72.
AMERICAN HISTORY.
Professor Lefler.
Junior-senior elective.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

A general survey of the history of the United States. The first course begins with Columbus' discovery of America and goes to the end of the Civil War; the second begins at this point and ends in 1949. (Both American History sequences, c21-c22 and c71-c72, should not be taken.)

c143.
AMERICAN DIPLOMATIC HISTORY.
Professor Johnson.
Junior-senior elective.
Prerequisite, American History.

Credit, 3 semester hrs
Fee, $30.00.
25 assignments.

This course is a chronological treatment of American foreign relations from 1763 to the present. It discusses important characters and events in our diplomatic history and traces the origin and development of basic trends in our foreign policy.

c161.

NORTH CAROLINA, 1584-1815. Credit, 3 semester hrs.
Professor Lefler. Fee, $30.00.
Junior-senior elective. *25 assignments.*

A survey of the political, social, economic and cultural development of North Carolina from the first settlement until 1815.

c162.

NORTH CAROLINA, 1815-1959. Credit, 3 semester hrs.
Professor Lefler. Fee, $30 00.
Junior-senior elective. *25 assignments.*

A survey of political, economic, social and cultural development in North Carolina since 1815.

c170a-c170b.

SOCIAL AND EDUCATIONAL HISTORY OF THE UNITED STATES.

(See description of these courses under Department of Education.)

NOTE: Those who have taken Education c37a-b or c143a-b in previous years should not take these courses.

DEPARTMENT OF LATIN

c3.

INTERMEDIATE LATIN. Credit, 3 semester hrs.
Mr. Barnett. Fee, $30.00.
Prerequisites, two years of high school Latin, or one year of elementary college Latin. *25 assignments.*

This course is concerned with the translating of Cicero's *De Senectute,* with work in vocabulary, and with a review of the principles of grammar.

c8.

LATIN COMPOSITION. Credit, 3 semester hrs.
Mr. Barnett. Fee, $30.00.
Prerequisites, four years of high school Latin, or two years of college Latin. *25 assignments.*

This course will begin with translation into Latin of detached sentences illustrating the general principles of syntax and word order; the second half of the course will deal with continuous narrative and with questions of diction and style.

c21.

SELECTIONS FROM LATIN PROSE. Credit, 3 semester hrs.
Mr. Barnett. Fee, $30.00.
Prerequisites, two years of high school Latin, or one year of elementary college Latin. *25 assignments.*

The course consists of a review of Latin grammar and a study of Cicero's *De Amicitia.*

c22.

LATIN POETRY. Credit, 3 semester hrs.
Mr. Barnett. Fee, $30.00.
Prerequisites, four years of high school Latin, or two years of college Latin. *25 assignments.*

The course comprises the reading of the *Phormio* of Terence and selected odes of Horace. Emphasis is put on content and literary form.

DEPARTMENT OF MATHEMATICS

NOTE: Those desiring degree credit at the University should take Mathematics c7-c8 instead of c1-c2-c3.

cnA.

PLANE GEOMETRY. Non-Credit.
Mr. Witz. Fee, $35.00.
27 assignments.

A course designed to enable the student to acquire a thorough knowledge of the facts of plane geometry needed for continued work in mathematics and allied subjects. This course will be accepted by the University to remove a deficiency in plane geometry for admission. The material covered in this course, if taken in high school, would require one full school year, being equivalent to one unit.

c1.

INTRODUCTORY MATHEMATICS. Credit, 2 semester hrs.
Professor Garner. Fee, $20.00.
17 assignments.

This course treats the basic problems of college algebra. For a longer course in the subject, see Mathematics c7.

c2.

INTRODUCTORY MATHEMATICS. Credit, 2 semester hrs.
Professor Garner. Fee, $20.00.
18 assignments.

A study of functions, and their graphs, the limit notion and graphical treatment of the fundamental notions of the differential and integral calculus.

c3.

PLANE TRIGONOMETRY. Credit, 2 semester hrs.
Professor Linker. Fee, $20.00.
18 assignments.

The fundamentals of plane trigonometry are studied with less extensive application than in Mathematics c8.

c7.

COLLEGE ALGEBRA. Credit, 3 semester hrs.
Professor Garner. Fee, $30.00.
25 assignments.

This course treats the fundamental operations of algebra and emphasizes the solution of linear and quadratic equations. For a shorter course, see Mathematics c1.

c8.

PLANE TRIGONOMETRY. Credit, 3 semester hrs.
Professor Linker. Fee, $30.00.
25 assignments.

This course concerns itself with the definitions of the trigonometric functions, their relations to each other, and the application of these functions and log tables to the solutions of plane triangles.

c10.

MATHEMATICS OF FINANCE. Credit, 3 semester hrs.
Professor Linker. Fee, $30.00.
25 assignments.

This course is a study of simple and compound interest, annuities and their application to debt retirement by amortization and sinking fund methods, depreciation, and bonds, with an introduction to the mathematics of insurance.

c13.

SPHERICAL TRIGONOMETRY. Credit, 2 semester hrs.
Professor Garner. Fee, $20.00.
18 assignments.

This course is designed especially for those who are interested in nautical and aerial navigation. It concerns a study of the mathematics relations existing among the sides and the angles of a triangle on the surface of a sphere.

c31.

ANALYTIC GEOMETRY. Credit, 3 semester hrs.
Professor Hoyle. Fee, $30.00.
Prerequisites, Math 7 and 8. *25 assignments.*

This course includes the standard treatment of lines, conic sections, transformation of coordinate systems by translation and rotation, polar coordinates, parametric equations, lines and planes in solid analytic geometry.

c32.

DIFFERENTIAL CALCULUS. Credit, 3 semester hrs.
Professor Hoyle. Fee, $30.00.
Prerequisite, Math 31. *25 assignments.*

This course is devoted primarily to a study of the derivative and its applications in elementary differential geometry, physics, and the theory of maxima and minima. In the latter part of the course an introduction to the theory of infinite series is followed by a study of Taylor's series.

c33.

INTEGRAL CALCULUS. Credit, 3 semester hrs.
Professor Hoyle. Fee, $30.00.
Prerequisite, Math 32. *25 assignments.*

A first course in integral calculus.

DEPARTMENT OF MUSIC

c4.

FUNDAMENTALS OF MUSIC. Credit, 2 semester hrs.
Miss Henrotte. Fee, $20.00.
15 assignments.

A study of the rudiments of music; scales, intervals, and elementary harmonic material with practice in melody writing. The student must have access to a piano. Dictation exercises are required.

c14-c15-c16.

HARMONY. Credit, 2 semester hrs. each.
Miss Henrotte. Fee, $20.00 each.
Prerequisite, Music 4 or the equivalent. *18 assignments each.*

A first-year course in harmony. This covers the ordinary harmonic resources up to the chords of the seventh, their inversions, and elementary modulation. The student must have access to a piano.

c24-c25.

HISTORY OF MUSIC.
Miss Henrotte.

Credit, 2 semester hrs. each.
Fee, $20.00 each.
Lab. fee, $4.00 for c24 and $6.50 for c25.
15 assignments each.

Phonograph recordings of the music of the periods are used. Students will need a long play record player (33⅓ r.p.m.). Music c24-c25-c26 will be accepted for elective credit as the equivalent of Music 47-48 in residence. Music c24 covers the period from antiquity to the end of the sixteenth century. Music c25 concerns the seventeenth and eighteenth centuries.

DEPARTMENT OF PHILOSOPHY

c21.

INTRODUCTORY LOGIC.
Professor Luschei.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

A study of the fundamental principles of efficient thinking as a basis for rational belief and intelligent action. Practical orientation with emphasis on meeting problematic situations. Consideration of linguistic obstacles to clear and straight thinking; standards of valid reasoning; methods of confirming statements.

DEPARTMENT OF PHYSICAL EDUCATION

c11 or c12w

PERSONAL HYGIENE.
Professor Blyth.

Credit, 2 semester hrs.
Fee, $20.00.
16 assignments.

This course is designed to acquaint the student with basic scientific information regarding individual and community health, to develop wholesome attitudes toward physical, mental and social health, and to assist the student in developing sound health practices.

DEPARTMENT OF POLITICAL SCIENCE

cn1.

CITIZENSHIP.
Professor Wager.

Non-Credit.
Fee, $4.50.
21 assignments.

This course in citizenship is offered in cooperation with the United States Immigration and Naturalization Service to persons in the state who wish to become citizens of the United States. It is designed especially for those who cannot attend citizenship classes. Other sections of the course are available, the number of assignments for each varying.

c41.

THE GOVERNMENT OF THE UNITED STATES.
Miss Hunt.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

A general course dealing with the national government of the United States. Attention will be directed to the constitutional basis, the historical development, and the practical organization and operation of the institutions established for administering national affairs.

c51.

STATE GOVERNMENT IN THE UNITED STATES.
Miss Hunt.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

A study of the principles, organization, and administrative methods and functions of the state governments.

DEPARTMENT OF PSYCHOLOGY

*c24-c25.

GENERAL PSYCHOLOGY.
Professor King.
Sophomore, junior and senior elective.

Credit, 3 semester hrs. each.
Fee, $30.00.
25 assignments each.

The aim of the course is to present the essential phenomena of psychology, and the various methods of approach. Emphasis is placed on the organic relationships within the whole field.

DEPARTMENT OF RELIGION

c28.

THE ORIGIN AND SIGNIFICANCE OF THE BIBLE.
Miss Johnson.

Credit, 3 semester hrs.
Fee, $30.00.
25 assignments.

This course is an introduction to the literature of the Bible, with special consideration of the impact of the Hebrew-Christian faith upon modern man as he seeks a religious orientation in the contemporary situation.

DEPARTMENT OF ROMANCE LANGUAGES

NOTE: Candidates for degree credit at the University are required to take their courses in this department in residence.

Spanish

c3-c4.

SPANISH COMPOSITION.
Professor McKnight.
Prerequisites, either two years of high school or one year of college Spanish.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

The object of these courses is to provide the student with an opportunity to acquire practice in writing Spanish.

c21-c22.

SPANISH LITERATURE.
Professor McKnight.
Prerequisites, Spanish 3-4 or 11-12-13 or the equivalent.

Credit, 3 semester hrs. each.
Fee, $30.00 each.
25 assignments each.

Spanish c21 is a general survey of Spanish literature during the 16th and 17th centuries. There is the reading of selections from Lope de Vega, Cervantes, Calderon, etc. Spanish c22 gives a general survey of Spanish literature since the classical period, with special stress on the 19th century.

* Credit only for lecture part of course.

Russian

(See Germanic Languages.)

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

General Sociology

c51.

INTRODUCTION TO SOCIOLOGY. Credit, 3 semester hrs.
Mr. Thelin. Fee, $30.00.
Sophomore, junior, senior elective. *25 assignments.*

A general course dealing with the structure and function of contemporary societies and social relationships. A study is made of the way societies are formed, how they achieve their organization and unity, and the way they change.

c52.

SOCIAL PROBLEMS. Credit, 3 semester hrs.
Mr. Norsworthy. Fee, $30.00.
25 assignments.

An introductory course with primary emphasis on both the positive and pathological features of society.

*c62a-c62b.

MARRIAGE. Credit, 2 semester hrs. each.
Professor Sessoms. Fee, $20.00 each.
16 assignments each.

(a) Backgrounds of American marriage institutions; analysis of mate selection and the involvement processes leading to marriage. (b) Adjustments after marriage; marital conflict and accommodation; problems of parenthood; consideration of counseling and other stabilizing devices provided by communities.

c125.

THE NEGRO. Credit, 3 semester hrs.
Mr. Norsworthy. Fee, $30.00.
Junior and senior elective. *25 assignments.*

This course includes a study of the American Negro's historical and cultural background, aspects of Negro life and the problems of race relations.

*c161a-c161b.

SOCIOLOGY OF THE FAMILY. Credit, 2 semester hrs. each.
Professor Sessoms. Fee, $20.00 each.
16 assignments each.

(a) A world view of the variety of family forms using an historical-sociological frame of reference; contributions of Western Civilization to the contemporary American scene. (b) Differentiation of modern American family types; impact of urbanization and other sources of social change on marriage and family designs; unsolved problems and proposed solutions.

c173.

COMMUNITY RECREATION. Credit, 3 semester hrs.
Professor Sessoms. Fee, $30.00.
25 assignments.

This course contains materials of study concerning the foundations of organized recreation—background and theories; principles and objectives; social and economic factors; public, private and commercial interest in recreation; the social institutions' and government's relation to recreation.

* A three semester hour course in this subject will be available during the summer of 1960.

c176.

PROGRAM PLANNING FOR COMMUNITY RECREATION. — Credit, 3 semester hrs.
Professor Sessoms. — Fee, $30 00.
25 assignments.

This course is designed to orient the student to the fields of recreation activities, principles and methods of program planning, time allocation for schedules, special activities and events, use of recreation areas and facilities, and the role of leadership in program operation. It is recommended that Sociology c173 be taken before Sociology c176 is begun.

c192.

CRIMINOLOGY. — Credit, 3 semester hrs.
Mr. Norsworthy. — Fee, $30.00.
25 assignments.

The principles of criminology and penology with emphasis on psycho-sociological factors; study of historical and contemporary theory and practice.

Rural Sociology

c102.

RURAL SOCIOLOGY. — Credit, 3 semester hrs.
Professor Hobbs. — Fee, $30.00.
25 assignments.

This course makes a study of the rural community, considering the advantages and disadvantages of farm life, rural health, sanitation and social institutions.

Anthropology

*c41.

GENERAL ANTHROPOLOGY. — Credit, 3 semester hrs.
Professor Honigmann. — Fee, $30.00.
25 assignments.

A basic introduction to man as a species and as a producer of customs and culture. The evolution of mankind, physical anthropology, modern varieties and races, and human capabilities. The fundamental culture developments of human history with a general study of the functioning principles of culture. Study of selected culture areas.

* Available after June, 1960.

UNIVERSITY EXTENSION SERVICES

The Extension Division is the administrative agency through which the University extends its services to the people. It is the function of the Division to sponsor and develop educational services, which the University of North Carolina can provide better than any other public institution because of its nature as the State University, to citizens of North Carolina not enrolled as resident students.

Services of the Division may be broadly categorized as the offering of regular University courses through extension classes, correspondence instruction, and television, non-credit adult education programs and services on the campus and throughout the state, and services to the public schools.

In addition to the correspondence courses listed in this catalogue, the University of North Carolina offers the following services to the people of the state.

Audio-Visual Education. Audio-visual materials and services are available to schools, colleges, civic groups and other agencies. Films for community programs, business and industry and other adult groups are made available each month through public libraries.

Class Instruction. Extension courses in regular University subjects are offered in communities throughout the state. These courses are taught by members of the University faculty and, when all requirements are met, give the same credit as courses in residence.

Conferences and Short Courses. Conferences and short courses for various organizations and groups are arranged at Chapel Hill and at other North Carolina communities.

Music. The services of the North Carolina Music Program are available to schools, colleges, churches and other organizations in the communities of the state. Two FM Radio Programs, "Let's Listen to Opera," are produced weekly.

School Relations. Services to the schools include: (a) high school debating contests; (b) high school study and discussion programs dealing with the general subject of building world peace; (c) high school contests in academic subjects; (d) the North Carolina Scholastic Press Institute; and (e) the North Carolina School Art Exhibition.

School Tests. Standardized educational tests are distributed to authorized educational agents. Faculty members of the School of Education serve in an advisory capacity in evaluating new tests.

Television Instruction. Extension courses in regular University subjects are offered on Channel 4, WUNC-TV. These courses are taught by members of the University faculty and, when all requirements are met, give the same credit as courses in residence.

Business Services. The University sponsors the adult education program for businessmen developed by the Bureau of Business Services and Research.

Communication Center. WUNC radio, WUNC-TV at Chapel Hill, recording, graphic presentation, and still photography are provided as an extension of the University to the people of North Carolina.

Continuation Education, Division of Health Affairs. The University conducts postgraduate medical and dental courses on and off the campus. Short refresher courses and conferences for public health officials, nurses, health educators, dietitians and other professional groups are held each year.

Community Drama. Assistance in organizing, play selecting, costuming, make-up, and lighting is available to schools, colleges and communities throughout the state.

Economic and Social Surveys. *The University of North Carolina News Letter*, containing information on social and economic conditions in North Carolina, is published fifteen times each year.

Educational Research and Service. Members of the faculty of the School of Education offer: educational tests and measurements; school surveys and advice on school buildings, equipment, and general administrative problems.

English Extension. Services to teachers and students of English include: (a) publication and distribution of the *North Carolina English Teacher*; (b) professional meetings and conferences; (c) coordination of English Teachers Association committee activities; (d) exchange service with other state and regional associations.

Recreation. Services in public recreation and leisure time problems are offered through the Bureau of Recreation.

For information about any of the above services, write to the UNIVERSITY EXTENSION DIVISION, Chapel Hill, N. C.

CORRESPONDENCE COURSES OFFERED BY NORTH CAROLINA STATE COLLEGE EXTENSION DIVISION

Raleigh, N. C.

(Applications for these courses should be sent directly to North Carolina State College, Box 5125, State College Station, Raleigh, N. C.)

Agriculture

Course	*Credit*
A. I. 214, Feeds and Feeding I	2 Semester Hours
A. I. 314, Feeds and Feeding II	2 Semester Hours
Hort. 220, Vegetable Gardening	2 Semester Hours
Hort. 223, Flower Growing	2 Semester Hours
Hort. 301, Plant Propagation	3 Semester Hours
Poul. 200, Poultry Production	2 Semester Hours

Architecture

Arch. 321, History of Architecture I	3 Semester Hours

Economics

Ec. 201, Economics	3 Semester Hours
Ec. 202, Economics	3 Semester Hours
Ec. 407, Business Law I	3 Semester Hours
Ec. 425, Industrial Management	3 Semester Hours

Education

Ed. 344, Secondary Education	2 Semester Hours

Engineering

M. E. 101, Engineering Graphics	2 Semester Hours
M. E. 102, Engineering Graphics	2 Semester Hours
E. E. 211, Elementary Circuits and Fields Theory	3 Semester Hours

English

Eng. 111, Composition	3 Semester Hours
Eng. 112, Composition	3 Semester Hours
Eng. 211, Business English	3 Semester Hours
Eng. 361, Backgrounds of English Civilization I	3 Semester Hours
Eng. 362, Backgrounds of English Civilization II	3 Semester Hours
Eng. 365, The American Mind I	3 Semester Hours
Eng. 366, The American Mind II	3 Semester Hours
Eng. 374, North Carolina Literature	2 Semester Hours
English Review	No College Credit

Geology

Geol. 120, Physical Geology	2 Semester Hours
Geol. 207, Physical Geography	2 Semester Hours
Geol. 208, Physical Geography	2 Semester Hours

History

Hist. 225, Modern Europe	3 Semester Hours
Hist. 226, Modern Europe	3 Semester Hours
Hist. 251, The U. S. to 1865	3 Semester Hours
Hist. 252, The U. S. since 1865	3 Semester Hours
Hist. 306, North Carolina History	2 Semester Hours
Hist. 331, The Old South	3 Semester Hours

Hist. 332, The New South ..... 3 Semester Hours
Hist. 412, Recent United States History ..... 3 Semester Hours

Political Science

Pol. Sc. 201, The American Governmental System ..... 3 Semester Hours

Mathematics

Math. 101, First Year Mathematics for Engineers ..... 5 Semester Hours
Math. 102, First Year Mathematics for Engineers ..... 4 Semester Hours
Math. 107, Plane Trigonometry ..... 3 Semester Hours
Math. 111, Algebra and Trigonometry ..... 4 Semester Hours
Math. 112, Analytic Geometry and Calculus A ..... 4 Semester Hours
Math. 122, Mathematics of Finance and Elementary Statistics ..... 4 Semester Hours
Math. 211, Analytic Geometry and Calculus B ..... 3 Semester Hours
Math. 212, Analytic Geometry and Calculus C ..... 3 Semester Hours
Math. 201, Calculus I ..... 4 Semester Hours
Math. 202, Calculus II ..... 4 Semester Hours
Review of Elementary Algebra ..... No College Credit
Plane Geometry ..... No College Credit
Solid Geometry ..... No College Credit

Modern Languages

M. L. 101, Elementary French ..... 3 Semester Hours
M. L. 102, Elementary French Grammar and Prose Reading ..... 3 Semester Hours
M. L. 201, French Prose ..... 3 Semester Hours
M. L. 401, Introductory Scientific French ..... 3 Semester Hours
M. L. 105, Elementary Spanish ..... 3 Semester Hours
M. L. 106, Spanish Grammar and Prose Reading ..... 3 Semester Hours
M. L. 205, Spanish Prose: Iberia ..... 3 Semester Hours
M. L. 206, Spanish Prose: Hispano-America ..... 3 Semester Hours
M. L. 103, Elementary German ..... 3 Semester Hours
M. L. 104, German Grammar and Prose Reading ..... 3 Semester Hours
M. L. 204, German Prose: German Civilization ..... 3 Semester Hours
M. L. 403, Introductory Scientific German ..... 3 Semester Hours

Psychology

Psy. 200, Introduction to Psychology ..... 3 Semester Hours
Psy. 302, Psy. of Personality and Adjustment ..... 3 Semester Hours
Psy. 304, Educational Psychology ..... 3 Semester Hours
Psy. 476, Psychology of Adolescence ..... 2 Semester Hours

Rural Sociology

R. S. 301, Sociology of Rural Life ..... 3 Semester Hours

Sociology

Soc. 202, General Sociology ..... 3 Semester Hours
Soc. 203, Current Social Problems ..... 3 Semester Hours
Soc. 301, Human Behavior ..... 3 Semester Hours
Soc. 304, Contemporary Family Life ..... 3 Semester Hours
Soc. 306, Crime and Delinquency ..... 3 Semester Hours
Soc. 402, City Life ..... 3 Semester Hours

Statistics

Stat. 361, Int. to Statistics for Engineers ..... 3 Semester Hours

Textiles

Tex. 101A, Yarn Principles	1 Semester Hour
Tex. 101B, Yarn Principles	2 Semester Hours
Tex. 201A, Yarn Manufacture II	3 Semester Hours
Tex. 201B, Yarn Manufacture II	4 Semester Hours
Tex. 301A, Yarn Manufacture III	3 Semester Hours
Tex. 301B, Yarn Manufacture III	4 Semester Hours
Tex. 323, Textile Testing II	3 Semester Hours

For further information write to the College Extension Division, North Carolina State College, Raleigh, N. C.

REGISTRATION BLANK FOR CORRESPONDENCE COURSES

Bureau of Correspondence Instruction University of North Carolina Chapel Hill, N. C.

DO NOT WRITE IN THIS SPACE

Course.....

Credit.....

Date.....

No. Assign.....

.....

Registration No.....

.....

This blank is to be filled out completely in applicant's own handwriting. It must be accompanied by check or money order made payable to the Bureau of Correspondence Instruction.

In sending this application, I agree to abide by the rules and regulations of the Bureau of Correspondence Instruction as set down on pages 12-13 of the catalogue.

1. Name (in full).....
   Mr., Mrs., or Miss
2. Present Address.....
   Street and Number or Box Number

   .....
   City County State
3. Permanent Address.....
4. Age..... Race..... Occupation.....
5. Previous Education (Be specific, naming institutions, dates and degree.)

   High School .....

   College .....

   Graduate School .....
6. If you have ever registered in any division of the University here, underline which division and give dates.

   Residence Term..... Correspondence.....

   Extension Class..... Summer School.....
7. Kind of credit desired (mark X):

   a. Undergraduate degree credit..... At what Institution?.....

   ..... Toward what degree?.....

   Have you secured the approval of the authorities?.....

   b. Certification Credit.....

   c. No Credit.....
8. If teaching, give KIND of certificate held..... Class..... No.....
9. Number and Title of course desired.....
10. Do you wish to secure the books from us?.....
11. I am enclosing: $.....Course fee (see page 11).

    .....Books. (Include 3% tax for texts.)

    $.....TOTAL

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The World of Wonderful Books: Adventures in Reading 27th Series. Mary Cutler Hopkins, April 1953. No. 3
Other People's Lives, 13th Series. Cornelia S. Love. July 1953. No. 4

VOLUME XIX

North Carolina Writers. Revised. Walter Spearman. October 1953. No. 1
Adventures in Reading, 28th Series. Marion Brown. January 1954. No. 2
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VOLUME I

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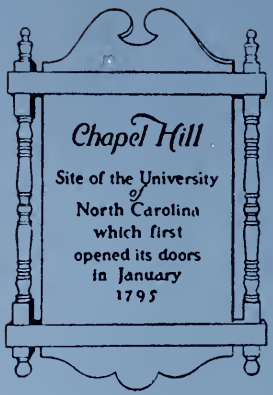
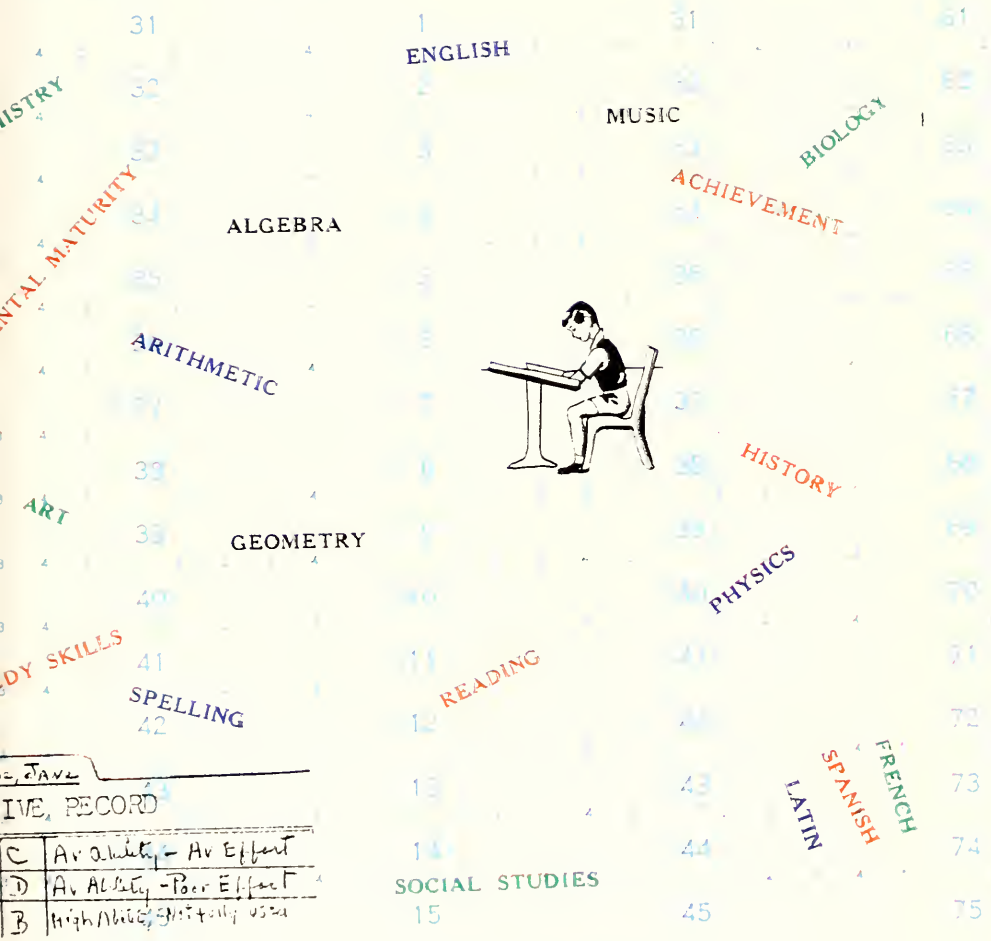
Single Copies, $0.75; to residents of North Carolina, $0.50 each

Address all queries, requests, orders and suggestions to:
Director, Interlibrary Center, Louis Round Wilson Library,
Drawer 870, Chapel Hill, North Carolina


Chapel Hill
Site of the University
of
North Carolina
which first
opened its doors
in January
1795

CATALOG OF EDUCATIONAL TESTS



Schools Tests and Materials Office
Box 1080, Chapel Hill, N. C.

UNIVERSITY OF NORTH CAROLINA
EXTENSION BULLETIN

Vol. XXXIX

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Vol.	XXXIX, No. 4	Educational Tests Catalog. Free.

MONEY ORDERS, CHECKS OR STAMPS ACCEPTED
ADDRESS: UNIVERSITY EXTENSION DIVISION,
CHAPEL HILL, N. C.

UNIVERSITY OF NORTH CAROLINA

EXTENSION BULLETIN

EDUCATIONAL TESTS

School Tests and Materials
Chapel Hill, N. C.
204 Abernethy Hall
Phones 9087 - 9088

FOREWORD

The use of standardized tests in instruction has become accepted practice in public schools of today. The need for a central depository where teachers can go to examine and select tests appropriate to their needs and also receive professional counsel on testing problems is always pressing.

Ninety per cent of the State's elementary schools with four or more teachers have used one or more kinds of published tests within the past two years according to 1467 replies to a questionnaire issued by the Department of Public Instruction in a recent survey of testing practices. Almost twenty per cent of these schools have a continuing or long range program of testing.

The services of the School tests and Material office of the Extension Division of the University of North Carolina can be of inestimable value to the public schools of North Carolina in this phase of instruction.

Charles F. Carroll

State Superintendent of Public Instruction

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SERVICES AVAILABLE

Professional

If a school or school system is planning to develop a testing program, or desires to have their present program evaluated, the School Tests and Materials Office will attempt to secure experts from the School of Education to confer with school officials concerning the selection of tests, administration, and interpretation of results.

Some of the companies from whom we purchase testing materials also have professional counselors in this area. Their services are available upon request, but the request must be made far enough in advance of the testing date to allow the representative to fit it into his schedule.

Scoring Services for Schools

The University Testing Service is prepared to hand-score or machine-score most tests used in the public schools and also to make such statistical studies and summaries as may be needed by schools to obtain maximum benefit from their testing programs.

The Testing Service makes a charge of 2c *per score* for machine-scoring. If hand-scoring is necessary because of the nature of the test or because of poor marking, the fee will usually be double, or 4c per score. For additions and other simple computations and for looking up percentile ranks, the charge is 1c per operation. When more than 2000 of the same test are to be scored, the Testing Service customarily makes a reduction of 15% on the charges cited above.

Tests to be machine-scored require the use of IBM-type answer sheets and electrographic or number 1 *soft lead* pencils. For accurate machine scoring, it is necessary that all marks be black and shiny. Even if students have not marked their papers well while taking the tests, teachers can insure good marking by collecting the test booklets and then having students go over their marks a second time.

Arrangements for scoring should be made directly with the Testing Service, for in this way prompt service can be obtained and definite commitments made as to the time required for scoring. All inquiries concerning scoring should be addressed as follows:

W. D. Perry, Director
University Testing Service
Peabody Hall
Chapel Hill, N. C.

NOTE: The School Tests Office **does not** score answer sheets — see above.

ORDERING PROCEDURE

The title of each test and the form desired should be indicated. If there is no specific choice of form, state "any form."

Please note the number of pupils to be tested, and order in *packaged quantities* the amount of tests required. *We do not break packages,* so care should be taken to order the number of packages which will come closest to filling your needs. Most tests are packaged in 35's, although some come in packages of 20's or 25's and a few are sold individually. Unless otherwise stated, complete accessories come with each package of tests.

Tests will be shipped either by parcel post, motor express, or railway express, whichever is least expensive and most expedient. Transportation costs will be added to the invoice.

Each order should designate the name of the person to whom the shipment is to be sent as well as the school name and complete address. Each order *must* indicate clearly how the charge is to be made.

All orders should be approved by the school principal, superintendent, or supervisor. Tests are not sent to individuals without such authorization, and unless they are charged to a school remittance must accompany the order. Allow twenty cents per package for mailing costs.

Lack of space prevents our stocking a sufficient number of tests for large, extensive programs, so quantity orders should be sent well in advance of the testing date to allow time for us to supply those needs.

When special orders are requested for tests not stocked, the cost of telegram and special delivery postage will be charged to the school.

Orders should be sent directly to:

School Tests and Materials
Chapel Hill, N. C.
Box 1050

TESTS AND THEIR USES

The Extension Division together with the School of Education would like it clearly understood that their purpose in handling tests is to facilitate the uses of these instruments in improving the learning of children of North Carolina. We believe that testing is an essential part of the learning process, and that pupils learn more rapidly, more accurately, and more permanently when they are tested with well chosen tests. To us the sale of tests is merely the beginning of a program for improving instruction.

In this bulletin we shall discuss three types of tests: (1) Achievement Tests, (2) Intelligence Tests, and (3) Interest Inventories.

Achievement tests are instruments to check upon the outcomes of teaching. If well-selected tests are used, more certain conclusions concerning the results of instruction can be drawn. Best results of learning are reached when both the teachers and the pupils have the goals or objectives of their teaching clearly defined, when materials are so manipulated that progress towards these goals is assured, and when there is an evaluation of the results obtained. Evaluation is always in the form of a judgment—a value judgment. Now these judgments of success or failure are made more clear and more definite when carefully prepared tests reflect the progress of pupils toward the defined goals. Defining the objectives of learning and testing are all parts of the same process. Testing, then, is not an added external activity but an integral part of the educative process.

Teachers have been using tests of some kind since the time of the first school, but their tests have not been too efficient. When two teachers grade the same paper, or when the same paper is graded by the same teacher a second time, wide differences in scores appear. In one case a photostatic copy of a geometry paper was sent to over a hundred teachers of mathematics to be scored. The results were truly ludicrous for the marks ranged from 28 to 92. It is possible to offer study after study whose results offer conclusive evidence that teachers' marks are not accurate.

It was to improve such variations in school marks that *standard achievement tests* were developed. These tests are bet-

See page 8 for ordering procedure

ter than the ordinary teachers' hastily constructed examinations in the following particulars:

1. Items are carefully constructed. They are selected by experts usually from facts and principles which occur most frequently in several courses of study. These items are then tried out in a preliminary way and are reworked as a result of this experience.
2. After agreement has been reached on the items to be included in the test, norms for each grade or subject are derived from test scores secured from a large representative sample (in some cases three or four hundred thousand) of the school population of the United States. *These norms are extremely useful as points of reference.* One can by administering such tests to a single class or to several classes in a school system determine the grade level achieved by each class.
3. The scoring is generally objective in that two careful scorers will come to the same conclusion concerning the value of the test.

There are a great variety of standardized tests available. Among them are:

1. **Achievement Tests.** These tests are most like the tests constructed by teachers for use in class. Test batteries which measure progress in reading, vocabulary, arithmetic, language, spelling, etc., are most frequently used. There are also separate tests of reading, arithmetic, language, and other subjects, which cover more completely these areas. Dr. Brown, in this bulletin, discusses the uses of reading tests while Dr. Hunt discusses tests at the high school level.
2. **Intelligence Tests.** By selecting items common to the experience of all children, and by avoiding those dependent upon schooling, it is possible to construct tests, called intelligence tests, which help us discover what a child can do rather than what he has done.

Intelligence tests have wide spheres of usefulness. They have been found to be of use at the beginning of a child's entrance into the formal school work of the first grade. It

See page 8 for ordering procedure

has been shown that a mental age of six as derived from intelligence tests is necessary for a happy mastering of first grade work. Tests show that first grade children vary in mental age from 4 to 8. Intelligence as measured by tests is necessary to learn successfully the usual school work, especially that part dependent upon the mastery of verbal material. Intelligence tests have also been highly useful in defining more precisely the lower limits of learning capacity such as the idiot, the imbecile, and the moron, as well as those of great ability, such as the bright, the very bright, and the gifted. In the areas of educational guidance intelligence tests have been found especially useful because they help us decide whether this failing boy is only lazy or is lacking in ability. They do aid us, then, in guiding children and students into school work where they can work happily. These are only a few illustrations of the great variety of uses to which intelligence tests may be put.

3. **Interest Inventories.** At the high school level such inventories help the teacher, the counselor, and the student to know better what areas of activity are most attractive to the student. This information is helpful in planning for him courses of study and possible occupations. Dr. Ellis discusses interest inventories in his section on the uses of tests in guidance.

4. There are other tests, inventories, rating scales, etc., which are carried by the School Tests and Materials Office of the Extension Division. Among these, tests of mechanical, clerical, and musical aptitudes deserve special mention because they are immediately useful in school. Inventories of adjustment, sometimes called personality tests, should be used and interpreted with the greatest of care.

Uses of Standardized Reading Tests

Every teacher knows that continuous evaluation must be a part of good teaching. At the close of each lesson a teacher is appraising the learning which has taken place during the previous period and asking herself how well the children learned what was planned for them. In addition to this continuous evaluation

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there must be, at stated intervals, a more objective appraisal of the growth of children. This may include teacher observations, teacher-made tests, informal inventories, and standardized tests.

A study and evaluation of pupil growth seems especially important in a skill area like reading, where the acquisition of basic skills must precede the learning of more mature skills. The current view-point which emphasizes meeting the needs of the individual and taking the child where he is and giving him maximum growth requires the use of standardized tests if the teacher is to know where the child is and what his needs are.

Standardized tests in reading may be classified into two groups: achievement tests and diagnostic tests. The achievement test is a standardized test which enables a teacher to compare those tested with established norms. This enables the teacher to know how the scores of a child, or a group of children, compare with the test norms. Reading achievement tests usually indicate achievement in relation to comprehension, speed, and vocabulary. Results on reading achievement tests have implications for planning the total program in reading. They do not tell the teacher much about the strengths and needs of the individual.

The diagnostic reading tests are important if the teacher wishes to appraise the strengths and needs of the individual. Some diagnostic tests are of the survey type and may be administered to groups of children. Other diagnostic tests are designed for use with one child at a time. The individual diagnostic test is the more rewarding to use but it obviously requires more time to administer.

The periodic use of standardized achievement tests and diagnostic tests in reading, combined with the use of informal inventories and the careful observation by the teacher, should provide the knowledge of the children which will make it possible for the teacher to develop a program which meets the needs of children and which helps them to become excellent readers.

Uses of Tests at the High School Level

Testing at the high school level serves many of the same purposes that it does at the elementary level. The high per-

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centage of drop-outs, the terminal nature of this level in our free public school system, and the beginning of specialization or varied curriculums according to future plans add at the high school level, however, a "last chance" urgency to any attempt to learn more about the capacity, skills, knowledge, interests, or adjustment of the individual or group.

Standardized tests are one means of helping the educator gain a better understanding of students and thus to provide more suitable methods and curriculums. Many believe that the high rate of drop-outs (only about 50% of the nation's fifth-graders graduate from high school and in the Southeast the percentage is much lower) could be reduced markedly through the insights gained by better testing programs.

The following uses of tests are illustrative rather than complete:

For the administrator: (a) to show student achievement and growth; (b) to provide basis for reports to parents; (c) to interpret school level and progress to the community; (d) to provide basis for guidance, sectioning, placement, etc.

For the teacher: (a) to analyze and diagnose problems; (b) to determine educational needs of students; (c) to determine achievement levels of individuals and classes; (d) to evaluate teaching methods and materials; (e) to identify the learners who are gifted, normal, or slow; (f) to help students see strengths and weaknesses.

For the student: (a) to promote motivation; (b) to reveal abilities, aptitudes, weaknesses; (c) to gain insight and aid in self-evaluation and improvement; (d) to provide basis for recommendation to jobs or college.

Uses of Tests in Counseling and Guidance

One of the major tasks of the teacher and the counselor is to understand boys and girls as individuals and to help them understand themselves. Experience and research have shown that to do this effectively information must be collected in such areas as home background, scholastic aptitude, special aptitudes, disabilities, personality adjustments, health, interests, past achievement, and plans for the future. Much of this information

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can be secured by using non-testing techniques such as interviews and planned observation. Other important information can be collected by using carefully constructed standardized tests. No one technique can be used to the exclusion of others. Each must be used in its appropriate place with due regard being given to the contribution it makes to the total understanding of the individual student.

Tests are particularly useful in the collection of certain types of information. General scholastic ability can be determined with reasonable accuracy by using one or more of several tests which are now available. Special aptitude tests, achievement tests, and interest inventories give useful insights into other important areas. Personality and other tests of adjustment are sometimes used but because of their questionable validity they should be administered and interpreted only by teachers and counselors who are well trained in testing.

The counselor uses test data along with all other pertinent information as he attempts to analyze the pupil and his problems. In this process he works with the pupil in a cooperative attempt to work out plans, adjustments, and decisions based upon the best evidence at hand. Some of this evidence can be secured only through the use of appropriate standardized tests. The job of the counselor is to select, use and interpret those tests which contribute to the better understanding of the pupil. With this understanding, the teacher, the counselor, and the pupil can work more effectively together in bringing about adjustments which are satisfying to the pupil and beneficial to society.

The Advisory Committee to School Tests and Materials:

Carl F. Brown, Ph.D.
Professor of Education
G. Gordon Ellis, Ph.D.
Associate Professor of Education
J. T. Hunt, Ph.D.
Associate Professor of Education
A. M. Jordan, Ph.D., Chairman
Professor of Education
Thelma Gwynn Thurstone, Ph.D.
Professor of Education

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ACHIEVEMENT BATTERIES

CALIFORNIA ACHIEVEMENT BATTERIES

These are group diagnostic and survey test batteries which include tests of reading vocabulary, reading comprehension, arithmetic reasoning, arithmetic fundamentals, mechanics of English, grammar and spelling. They make possible an achievement testing program in the basic skills which is both continuous and functional in accordance with the thinking of modern curriculum and guidance specialists. All levels may be scored in the test booklet; or separate self-scoring Scorezes (a carbon answer pad) may be used for the Elementary, Intermediate and Advanced Batteries. Machine-scoring answer sheets are also available for these levels. Separate Scorezes or machine sheets make the books reusable. It takes a set of three Scorezes, or Machine Answer sheets, for each student tested. The machine sheets may be hand-scored by using the hand-scoring stencil.

Nomographs

For use with the California Achievement Tests—these tables are designed to aid in the processing of test data. On one side numbers from 10 to 990 are listed alongside three column entries for each. These column entries show the numbers divided by 2, 3, and 6. A rapid way to obtain average grade placements for the three subject areas: Reading, Arithmetic, and Language, or to find average grade placements for the total battery. On the reverse side is a nomograph for the separate Language and Non-Language M.A.'s or I.Q's. All values have been rounded correctly when necessary. The procedures require no computation, but substitute a simple, mechanical operation.

Lower Primary Level, Forms W or X
Grades: 1-2
Time: 90 minutes
Price: $5.45 per 35

Upper Primary Level, Forms W or X
Grades: 3 and Lower 4
Time: 90 minutes
Price: $5.85 per 35

Elementary Battery, Forms W, X or Y
Grades: 4-6
Time: 120 minutes
Price: $6.20 per 35
Scorezes: (all forms) Reading: $ .10 each
Arithmetic: $ .10 each
Language: $ .10 each
Machine-answer sheets: Reading: $ .06 each
Arithmetic: $ .06 each
Language: $ .06 each

See page 8 for ordering procedure

Nomographs: $ .05 per copy
Hand stencils: $75 per set (for use with machine sheets)
Machine stencils: $1.50 per set
Profiles: Total Battery, $ .04 each
Summary of Survey Data Sheets: (Form for recording School or system-wide results. Not available for Advanced Level—$ .10 each)

Junior High Battery, Forms W, X or Y

Grades: 7-9
Time: 150 minutes
Price: Same as Elementary—except machine stencils are $1.95 per set

Advanced Battery, Forms W, X or Y

Grades: 9-14
Time: 150 minutes
Price: Same as Elementary, except machine stencils are $1.75 per set

Note: If extra accessories are desired for any of the batteries, they must be ordered separately.
Manuals: $.35 each
Keys: $.30 per set
Class records: $.10 each

ESSENTIAL HIGH SCHOOL CONTENT BATTERY, FORMS AM or BM

Contains four tests: Mathematics, Science, Social Studies, and Language and Literature. In each of these areas the test yields comparable measures of status that are of value in the appraisal of student progress, evaluation of the instructional program, curriculum revision, and student guidance. The results are also useful in predicting success in college. Easy to administer and score. Profile chart permits the graphic recording of results of the four tests, and aids in their interpretation. End of year percentile norms by grade are given in the Manual for each subtest and for total score, separately for students in academic and scientific courses, general and commercial courses, and for all students combined. Average scores in the Mathematics and Science Tests for groups having various amounts of training in these subjects are also provided. Mid-year percentile norms are available separately on request. An answer sheet is required for each student, and may be either hand or machine scored with key that comes in the package.

Grades: 10-12
Time: Five class periods—one 45 and four 40 minutes
Price: $9.95 per 35
Answer sheets, (required), $2.50 per 35

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Cumulative Individual Profile Sheets, $.04 each
Extra manuals, $.35 each
Extra class records, $.10 each
Extra keys, $.90 set

IOWA HIGH SCHOOL CONTENT EXAMINATION, FORMS L or M

Based on the month of April— this quick-scoring examination is designed to provide an accurate appraisal of the high school senior's and the college student's knowledge of the four basic areas of the typical academic high school curriculum: 1, English grammar and literature; 2, Mathematics; 3, Science; 4, Social Studies. Total score furnishes an evaluation of the student's general mastery of the subject-matter content in these areas. Part scores reveal fields in which the student is strong or weak. Useful for guidance and remedial work. Each package contains 25 test booklets and 25 hand-scoring answer sheets. Machine-scoring answer sheets also available. *Examiner's manual and scoring stencils* (either hand or machine) *must be ordered separately.*

Grades: 11-12 and college freshmen

Price: $3.80 per package of 25 tests, with 25 hand-scoring answer sheets

Extra hand-scoring answer sheets, $ .04 each
Hand stencils, $ ..30
Machine answer sheets, $ .06 each
Machine stencils, $ .50 per set (specify form)
Manuals: $ .35 each

IOWA TEST OF EDUCATIONAL DEVELOPMENT, Form Y-3S

A battery of nine objective tests designed to provide a comprehensive and dependable description of the general educational development of the high school pupil. Over 700 items are included, each selected for its discriminating power in the evaluation of the ultimate and lasting results of an educational program.

This is not primarily a test of subject matter; emphasis here is on broad intellectual skills and interests, or understanding of and ability to use what is learned, rather than on sheer knowledge of facts. The tests are designed for annual administration to all students in upper grades, regardless of grade classification or course registration. School administrators have found it a reliable and scientific aid in adapting instruction and guidance to individual pupil needs, evaluating and raising the levels of class and school achievement, correcting student and curriculum weaknesses, identifying gifted children and stimulating better education, reducing the number of drop-outs and repeaters.

The tests come in individual packages and can be ordered separately,

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or as a battery. Please specify test, carbon answer pads, machine answer sheets and stencils by Test number and title.

Specimen sets of each test, $.60

Test 1—Understanding of Basic Social Concepts—55 minutes
General knowledge and understanding of contemporary social institutions and practices.

Test 2—General Background in the Natural Sciences—60 minutes
General knowledge and understanding of scientific terms and principles, of common natural phenomena and industrial applications, and of the place of science in modern civilization.

Test 3—Correctness and Appropriateness of Expression—60 minutes
Basic elements in correct and effective writing; punctuation, usage, capitalization, spelling, diction, phraseology, and organization.

Test 4—Quantitative Thinking—65 minutes
General mathematics involving practical problems every high school graduate should be able to solve.

Test 5—Interpretation of Reading Materials in the Social Studies—60 minutes
Understanding, interpreting, and evaluating materials from social studies textbooks, and magazine and newspaper articles in the field of natural science.

Test 6—Interpretation of Reading Materials in the Natural Sciences—60 minutes
Understanding, interpreting, and evaluating materials from textbooks, and magazine and newspaper articles in the field of natural science.

Test 7—Interpretation—Literature—50 minutes
Appreciation and comprehension of selections from the major types of world literature.

Test 8—General Vocabulary—22 minutes
Measuring not only the student's ability to handle words, but also his "index of intelligence"—his aptitude for learning.

Test 9—Use of Sources of Information—27 minutes
Utilizing standard references and current literature for answers to specific problems.

Grades: 9-13

Time: As Above, or approximately 9 hours for total battery including rest periods.

Prices: Reusable test booklets, $2.25 per 20 (each test)

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Machine answer sheets, $ .06 each
Machine keys, $ .60 (each test)
Extra Manual, $ .30 each
General Manual, $ .60 each

METROPOLITAN ACHIEVEMENT TEST, Form A or B

The new edition of this battery is arranged in five levels covering grades 1 through 8.

Primary I: Subtests are word knowledge, word discrimination, reading, arithmetic concepts and skills.

Grades: Latter half of 1
Time: 1 hour and 45 minutes
Price: $5.35 per 35
Extra accessories: $ .55 set

Primary II: Subtests are the same as above with a dictation type spelling test added.

Grades: 2 and beginning 3
Time: 2 hours
Price: $6.85 per 35
Extra accessories: $ .75 set

Elementary Battery: Subtests in addition to those listed above are a language test, arithmetic computation, and arithmetic problem solving and concepts.

Grades: 3 and 4
Time: 2 hours and 45 minutes
Price: $6.85 per 35
Extra accessories: $ .85 set

Intermediate Battery Complete: Subtests are word knowledge, reading, spelling, language, arithmetic computation, arihmetic problem solving and concepts, social studies, and science.

Grades: 5 and 6
Time: 4 hours
Price: $9.55 per 35
Extra accessories: $1.15 set

Intermediate Battery Partial: Subtests are tool subjects, reading, language, spelling, arithmetic, and study skills.

Grades: 5 and 6
Time: 3 hours and 30 minutes
Price: $7.75 per 35
Extra accessories: $ .95 set

Advanced Battery Complete: Subtests are the same as those for the Intermediate Battery Complete.

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Grades: 7, 8, and beginning 9
Time: 4 hours and 15 minutes
Price: $9.55 per 35
Extra accessories: $1.15 set

Advanced Battery Partial: Subtests are the same as those for the Intermediate Battery Partial.

Grades: 7, 8, and beginning 9
Time: 3 hours and 45 minutes
Price: $7.75 per 35
Extra accessories: $ .95 set
Class Records. There are 2 in each package of tests—
Extra class records: $ .10 each

MACHINE SCORING EDITION

These tests in the two divisions are the same as the hand-scoring edition, but the booklets are reusable with machine-scoring answer sheets. A set of four answer sheets is required for each student.

Istermediate Battery Complete, Forms AM or BM

Grades: 5 and 6
Time: 4 hours and 30 minutes
Price: $10.85 per 35
Answer Sheets: Arithmetic ..... $1.30 per 35
Reading ..... 1.55 per 35
Language ..... 1.55 per 35
Social Studies ..... 1.55 per 35
Machine stencils, $1.45 per set

Advanced Battery Complete, Forms AM or BM

Grades: 7, 8, and beginning 9
Time: 4 hours and 30 minutes
Price: $10.85 per 35
Answer Sheets and stencils same as Intermediate

MYERS-RUCH HIGH SCHOOL PROGRESS TEST, FORMS AM or BM

Measures achievement in high school subjects consisting of 120 items equally divided among English, social studies, mathematics, and science. Useful for group analysis but not for individual student appraisal. Separate answer sheets are required only for machine-scoring but may also be hand-scored with the key that comes in the package.

Grades: 9-12
Time: 60 minutes
Prices: $3.75 per 35

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Machine answer sheets, $1.60 per 35
Machine stencils, $ .60 per set (specify form)
Hand keys, $ .20
Extra manuals, $ .30
Extra class records, $ .10 each

OTIS CLASSIFICATION TEST (REVISED), FORM T

A combined mental ability and achievement test that aids in classification of pupils on the basis of mental development and classroom achievement. The achievement test covers reading, spelling, language, and grammar, arithmetic, geography, history and civics, hygiene vocabulary, music and art. The mental ability test is the Otis Beta Quick-Scoring Test. Separate answer sheets are required only for machine-scoring.

Grades: 4-9
Time: 30 minutes for each part
Price: $4.00 per 35
Machine answer sheets: $1.80 per 35
Machine stencils, $ .60 per set

STANFORD ACHIEVEMENT TESTS (HAND-SCORING EDITION)

Four complete batteries of tests for grades 1 through 9 providing a wide range of subject-matter coverage at each grade level.

Primary Battery, Forms L, M, or N, contains tests in paragraph meaning, word meaning, spelling, arithmetic reasoning, and arithmetic computation.

Grades: 1.9-3.5
Time: 80 minutes
Price: $3.25 per 35

Elementary Battery, Forms L, M, or N, contains tests in word meaning, paragraph meaning, language, arithmetic reasoning, arithmetic computation and spelling.

Grades: 3.0-4.9
Time: 135 minutes
Price: $3.90 per 35

Intermediate Battery, Complete, Forms L, M, or N, contains tests in word meaning, paragraph meaning, social studies (both history and geography), science, language, arithmetic reasoning, arithmetic computation, spelling, and study skills.

Grades: 5-6
Time: 215 minutes
Price: $6.35 per 35

Intermediate Battery, Partial, Forms L, M, or N, contains the same tests as

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the complete battery except that social studies, science, asd study skills are omitted.

Grades: 5-6
Time: 140 minutes
Price: $5.25 per 35

Advanced Battery, Complete, Forms L, M, or N, contains tests in paragraph meaning, social studies (history, geography, citizenship), science, language, arithmetic reasoning, arithmetic computation, spelling, and study skills.

Grades: 7-9
Time: 215 minutes
Price: $6.35 per 35

Advanced Battery, Partial, Forms L, M or N, contains the same tests as the complete battery except that social studies, science, and study skills are omitted.

Grades: 7-9
Time: 140 minutes
Price: $5.25 per 35

MACHINE SCORING EDITION

These tests in the two divisions are the same as the hand-scoring edition, but the booklets are reusable with machine-scoring answer sheets. A set of three sheets is required for each student.

Intermediate Battery-Partial, Forms JM or KM

Grades: 5-6
Time: 140 minutes
Prices: Tests $6.90 per 35
Answer sheets: Arithmetic ..... $1.60 per 35
Reading ..... 1.35 per 35
Spelling and Language ..... 1.60 per 35
Machine stencils, $1.10 per set

Advanced Battery-Partial, Forms JM or KM

Grades: 7-9
Time: 140 minutes
Prices: Same as Intermediate

Note: If extra accessories are needed for any of the batteries they must be ordered separately.
Extra sets of accessories, $.60 per set (specify level and form)
Extra class records, $ .10 each
Individual profile charts, $ .04 each

SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS (STEP) Form A

STEP is a series of achievement tests of a new kind. They measure critical skills in application of learning in seven major fields of school and

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college instruction. They measure these skills in a continuous way from the fourth grade of elementary school through the sophomore year of college. The STEP series makes possible a testing program aimed at the central goal of most teachers—the ability of students to use what they have learned in the classroom.

WHAT STEP MEASURES. Critical skills and understandings that lie at the heart of each major subject field. Progress of the student and the class along the central paths of learning in each field. Ability of the student to apply his learning in problems of practical consequence. Competencies that teachers seek for all young people as they progress through school. Relative achievement of the individual student in terms comparable from field to field and continuous from level to level.

HOW STEP MEASURES. By concentrating on central skills in each field which are most important to maturation and further learning. By following the central paths of learning over a long period of time with tests at successively higher levels. By inviting the student to apply his skills in problems that have meaning and sense for him. By limiting measurement to those outcomes of general education which are central in all kinds of curriculums. By affording a unified measure of student progress in which the different fields and levels are integrated into a continuous whole.

WHAT STEP COVERS. **Listening Comprehension; Reading; Writing; Mathematics; Science; Social Studies; Essay.**

RANGE: **ORDER BY LEVEL.** Level 4—Grades 4-6
3—Grades 7-9
2—Grades 10-12
1—Freshman and sophomore college

Time: Each test, but 1, is 70 minutes, divided into 2 35-minute periods

Prices: Reading Test Booklets, $4.80/20
Writing Test Booklets, $4.80/20
*Listening Test Booklets, $3.90/20
Mathematics Test Booklets, $4.80/20
Science Test Booklets, $4.80/20
Social Studies Booklets, $4.80/20
**Essay Test Booklets, $1.25/20

* Dictation script is in Directions for Administering and Scoring Listening. Order separately, specifying form and level.

** Essay topics and comparison papers for scoring are in the Examiner's Handbook. Order separately, specifying level.

Answer sheets, $1.25/20 (for use with any STEP test except Essay—which uses no answer sheet. Scorable by hand or machine. Order one sheet per student for each test)

Scoring stencils, $55 each (specify test and level)

Directions for Administering—free with booklets except for Listening and Essay.

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Manual for Interpreting Scores, $1.25 each (a separate manual is necessary for each field except Essay-specify)
LISTENING—Directions for Administering and Scoring, $1.25 each. (contains script for dictating content of test)
ESSAY—Examiner's Handbook, $5.50 each—specify level (contains topics and comparison papers for rating essays and directions for administering, scoring and interpreting)
Technical Report, $1.25 each (covers all STEP tests. Contains background information and statistical data)
Student Profile, $ .55/20 (single sheet provides space for all STEP and SCAT scores)
Score Distribution Sheets, $1.05/50 (facilitates hand tabulation of scores to determine class or grade distributions)

TESTS OF EDUCATIONAL ABILITY (TEA)

These are designed to meet the school need for tests that will accurately predict academic success—both in over-all grade average and in specific areas. The TEA are designed to test students in three specific abilities: Language, Reasoning, and Quantitative. Grade-level norms (AQ—ability quotient) and Age-level norms (IQ) are given.

Range: Grades 4-6, time, 1 hour
6-9, time, 65 minutes
9-12, time, 45-50 minutes

Prices: Booklets, $7.10/20
Answer sheet-profile, $6.10/100
Scoring stencil, $ .60 each
Manual, $ .40 each

APTITUDE TEST

APTITUDE TEST FOR OCCUPATIONS

This is a group of six tests, divided as follows:

Test 1. Personal-Social Aptitude—Price:	$3.20 per 35
Test 2. Mechanical Aptitude	4.00 per 35
Test 3. General Sales Aptitude	3.20 per 35
Test 4. Clerical Routine Aptitude	2.45 per 35
Test 5. Computational Aptitude	2.45 per 35
Test 6. Scientific Aptitude	3.20 per 35

These tests may be ordered separately, or as a group. The answers may be marked in the test booklet or on separate answer sheets that can be scored either by hand or machine with the use of a special stencil. The package contains all necessary materials for scoring if answers are marked in the booklet.

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Grades: 9-13
Time: Varies on individual tests—total battery requires one hour and 47 minutes
Price: As above for test booklets
Separate answer sheets: $ .06 each
Hand or machine stencils for separate answer sheets $ .50 set
Profiles: $ .06
Manual $ .30

DETROIT GENERAL APTITUDE EXAMINATION, FORM A

This examination is a new step in the field of aptitude testing. Three kinds of aptitudes—intelligence, mechanical, and clerical—are included in the sixteen-page booklet. It is given as one test to be analyzed later into three fields. Economy of testing has been achieved by using certain tests in more than one type of aptitude. For example, tests 4 and 13 are used for intelligence, mechanical, and clerical aptitudes. The pages are so arranged that the tests of all three aptitudes are scattered among the sixteen pages.

1. The general results are used for purposes of classification of interests which will aid pupils to recognize the values of high school studies.

2. They are used for individual counseling in cases of educational disability, in cases of uneven education accomplishments, for education guidance, and for possible causes of emotional and social maladjustment. The detailed data on the "Analysis of Results" charts are especially helpful in these cases.

3. The intelligence sections, consisting of ten pages of sub-tests, have five of them with items requiring reading of words, sentences, or other language materials, but the remaining five pages without such materials. Package contains tests, Analysis of Results charts, Answer Key and Record Sheet. Teacher's Handbook must be ordered separately.

Grades: Junior and senior high school
Time: 85 to 90 minutes
Price: $5.65 per 35
Teacher's Handbook, $ .50 each
Extra Analysis of Results Charts, $ .55 per 35

(NOTE: The Ayres Handwriting Scale is needed in scoring Test I of this Examination)

DIFFERENTIAL APTITUDE TESTS

An integrated battery of aptitude tests, providing eight reliable scores useful in educational and vocational guidance at the junior and senior high school levels. Careful research and standardization give assurance of stable scores and meaningful profiles.

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Administration is simple. Clear instructions are printed in each test booklet. Convenient time units make it possible for classroom teachers to test in regular class periods, and allow for flexibility in the testing program. The clerical test requires six minutes of actual working time, the two parts of the Language Usage together take thirty-five minutes, and the other tests require twenty-five to thirty minutes each.

Scoring by hand or by machine is simplified by the use of IBM perforated stencils. The charting of results is made easy by use of clear norms tables and a convenient profile report form.

Test Booklets are sold in packages of 25 copies. Seven different booklets are published, since the Language Usage booklet includes both the Spelling and Sentence tests.

A separate answer sheet is required for each student. The sheets may be either hand or machine scored by using the proper stencil keys.

Price: Hand stencils, $2.00 per set
Machine stencils, $2.00 per set
Separate stencils, $ .30 each

	Test Booklets	*Answer Sheets*
Verbal Reasoning	$3.65 per 25	$2.30 per 50
Numerical Ability	2.75 " "	" " "
Abstract Reasoning	3.65 " "	" " "
Space Relations	4.25 " "	" " "
Mechanical Reasoning	4.55 " "	" " "
Clerical Speed and Accuracy	3.65 " "	" " "
Language Usage	3.65 " "	" " "
Individual Profile Charts	1.50 per 50	or $16.00 for 500
Interpretive Manual	2.40 each	of any *one* test

FLANAGAN APTITUDE CLASSIFICATION TESTS (FACT)

This separate booklet edition measures skills in 14 critical job elements found to be important to success in numerous occupations. Different occupations require different combinations of skills: no occupation requires high ability in all 14 FACT-measured skills. Thus individual students or groups of students, may be given selected tests from the FACT battery when particular job skills are in question.

All the FACT school-scoring tests are paper-and-pencil tests; they can be given to a group by one examiner. Students mark their answers in the self-scoring booklets. Aptitude Classification Sheets provide the counselor with a means of computing a student's job element aptitues. Jobs are grouped as to: professional, business, and skilled trades.

Range: High school and adult

Time: 5 hours 28 minutes for entire battery. Individual tests vary from 5 to 40 minutes

Prices: Booklets, $2.75/20 **(ORDER BY NUMBER OR TITLE AS FOLLOWS)**

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FACT TEST BOOKLETS—

1A—Inspection	8A—Judgment
2A—Coding	9A—Arithmetic
3A—Memory (2A must be given first)	10A—Patterns
4A—Precision	11A—Components
5A—Assembly	12A—Tables
6A—Scales	13A—Mechanics
7A—Coordination	14A—Expression

Aptitude Classification Sheets, $ .75/20
Student's booklet, $ .30 each (each student must have one—provides worksheets for all occupations)
Examiner's Manual, $ .35 each
Counselor's booklet, $ .50 each
Technical supplement, $ .35 each
Manual, "Interpreting Test Scores", $ .30 each

ART

MEIER ART JUDGMENT TEST

This test consists of a book of 100 pairs of pictures printed by a special process resembling etching, and a record sheet containing instructions, statements of difference between pairs of pictures and a means of recording pupil judgment.

Grades: Junior and senior high school
Price: $1.35 per book
Test record sheets: $ .06 each
Manuals, $ .35
Keys, $ .20

ENGLISH LANGUAGE ARTS

BARRETT-RYAN-SCHRAMMEL ENGLISH TEST, FORMS DM or EM

Contains five subtests covering Functional Grammar, Punctuation, The Sentence (parts of speech, parts of a sentence, sentence elements), Vocabulary, and Pronunciation. Content is based on the common content of leading textbooks and courses of study, the experience of teachers and supervisors using earlier editions, and detailed study of types of students errors. No separate answer sheet is required except for machine scoring—they may also be hand scored with the key that comes in the package.

Grades: 9-12
Time: 60 minutes
Price: $3.75 per 35
Separate answer Sheets, $1.80 per 35

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CALIFORNIA LANGUAGE TEST, FORM W

This test is identicial with the Language part of the achievement battery. It is divided into two major tests, Mechanics of English and Grammar and Spelling. The first major test is in turn divided into sections giving part scores for diagnostic purposes. It may be answered in the test booklet or on separate Scorezes or machine answer sheets.

Elementary
Grades: 4-6
Time: 25 minutes
Price: Tests, $3.15 per 35
Scorezes, $ .10 each
Machine answer sheets, $ .06 each
Hand keys for machine sheets, $ .25 each
Machine keys, $ .30 each

Junior High
Grades: 7-9
Time: 29 minutes
Price: same as Elementary
Machine keys, $ .70 each

Advanced
Grades: 9-14
Time: 31 minutes
Price: same as Elementary
Machine keys, $ .50 each

COOPERATIVE ENGLISH—Combined booklet edition—1960 revision

This comprehensive instrument to measure the most important basic English skills has now been compiled into two tests for each level instead of 3. They are: READING COMPREHENSION and ENGLISH EXPRESSION. The **Reading Comprehension Test** contains two parts (Vocabulary and Reading) and yields four scores—Vocabulary, Speed and Level of Comprehension and a total Reading Comprehension score. The **English Expression Test** contains two parts—(Effectiveness and Mechanics). Together these yield a single best estimate of a student's ability to appreciate good English expression. There is only 1 answer sheet for the revised edition and it can be hand or machine scored. The same answer sheet is used for all forms and all levels.

Lower Level: Forms 2A and 2B
Grades: 9-12
Time: 40 min. per part or total of 80 minutes
Prices: Test booklets, $5.25 per 20

See page 8 for ordering procedure

Answer sheets, $1.25 per 20
Scoring Stencils, $50 each (specify form)
Manual for Interpreting scores, $1.25 each
Student Report-Profile, $1.25 per 20
Score Distribution Sheets, $1.00 per 50
Technical Report, $1.25 each

Higher Level: Forms IA and IB
Grades: College freshmen and sophomores
Time: Same as Lower Level
Prices: Same as Lower Level

ESSENTIALS OF ENGLISH TEST, FORMS A or B

This test comes in a six-page booklet which is divided into five parts as follows: I, Spelling; II, Grammatical Usage; III, Word Usage; IV, Sentence Structure; V, Punctuation and Capitalization.

The package contains tests, directions, scoring key, class record and Diagnostic Key.

Grades: 7-12 and college freshmen
Time: 45 minutes
Price: $2.30 per 25

IOWA LANGUAGE ABILITIES TESTS

There are two tests in this group. Each test covers spelling, word meaning, language usage, capitalization, and punctuation. The Intermediate also covers sentence sense and grammatical form recognition. A **Manual for Interpreting,** which must be ordered separately, gives detailed information on diagnois and remediation.

Elementary, Form A
Grades: 4-7
Time: 48 minutes
Price: $4.05 per 35
Manual for Interpreting either Elementary or Intermediate, $ .35 each

Intermediate, Form B
Grades: 7-10
Time: 46 minutes
Price: $4.95 per 35
Manual for Interpreting, $ .35 each

MACHINE-SCORING EDITION, FORMS AM or BM

Intermediate

Grades: 7-10
Time: 46 minutes

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Price: $6.35 per 35
Machine answer sheets, $2.50 per 35
Machine stencil, $ .85 set
Manual for Interpreting, $ .35 each

TEST OF ENGLISH USAGE, FORM A

Divided into three parts: Test I—Mechanics of Writing, which includes capitalization, use of the apostrophe, and punctuation; Test II—Accurate Use of Words, which includes words of action and verb forms; and Test III—Building Sentences and Paragraphs. Student answers are marked on the test booklet or on separate Scorezes or machine-scoring answer sheets. The machine answer sheets can be scored by hand with the hand-scoring stencil.

Grades: High school and college
Time: 2-50 minute periods
Price: $3.90 per 35
Scorezes, $ .10 each
Machine answer sheets, $ .06
Machine stencils, $ .70
Hand-stencils, $ .30

TRESSLER ENGLISH MINIMUM ESSENTIALS TEST, FORM A

Covers the essentials of good usage in grammatical correctness, vocabulary, punctuation and capitalization, sentence structure, sentence sense, inflection and accent, and spelling. Separate answer sheets are not necessary except for machine scoring.

Grades: 8-12
Time: 40-50 minutes
Price: $2.85 per 25
Machine answer sheets, $ .06 each
Machine keys, $ .30

UNDERSTANDING THE SENTENCE, BOOKS I and II

Two practical workbooks that provide direct teaching of sentence skills and techniques through a variety of practice exercises. Important points of usage, grammar, and punctuation are reviewed as needed. Book I develops understanding of the basic patterns and elements of the sentence including parts of speech, capitalization, and punctuation. Book II builds upon Book I and gives particular attention to building more effective sentences through variety of sentence structure. Use of the two books in successive years of high school provides for steady progress in building sentence skills.

See page 8 for ordering procedure

Grades: Designed for 9 and 10; may be used 8-12
Price: Books $1.30 each

FOREIGN LANGUAGE

COOPERATIVE FRENCH TEST, ELEMENTARY FORMS R or Q

This test consists of three parts: Reading, Vocabulary, and Grammar. Reading comprehension is tested by incomplete statements in French, for each of which the student selects the most reasonable of five suggested conclusions. In the Vocabulary section, he selects the most nearly satisfactory English equivalent for each French word. In the Grammar section, he selects the one of five choices which correctly completes the translation into French of a given English sentence. Separate answer sheets may be used, but are not required except for machine scoring.

Grades: Students in first two years of high school French or college freshmen
Time: 40 minutes
Prices: Tests $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35 (required with separate answer sheets)

COOPERATIVE LATIN TEST, ELEMENTARY FORMS R or Q

This test consists of three parts: Reading, Vocabulary, and Grammar. The Reading section includes both statements in Latin, for each of which the student selects the most reasonable Latin conclusion, and a number of short connected passages, each followed by a group of questions in English concerning its content. In the Vocabulary section the student selects the most nearly satisfactory English equivalent for each Latin word. In the Grammar section, he selects the word or phrase which correctly completes the translation into Latin of a given English sentence. Separate answer sheets may be used, but are required only for machine scoring.

Grades: Students in the first two years of high school or college freshmen
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35 (required with separate answer sheets)

COOPERATIVE SPANISH TEST, ELEMENTARY FORM P

Consists of three parts: Reading, Vocabulary, and Grammar. Reading comprehension is tested in incomplete statements, for each of which the student selects the most reasonable of five suggested conclusions. In the Vocabulary section, he selects the most nearly satisfactory English equiva-

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lent for each Spanish word. In the Grammar section, he selects the one of five choices which correctly completes the translation into Spanish of a given English sentence. Separate answer sheets may be used but are required only for machine scoring.

Grades: Students in the first two years of high school or college freshmen
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35 (required with separate answer sheets)

COOPERATIVE SPANISH TEST, ADVANCED, FORM P

Contents same as Elementary level.
Grades: Students with more than two years of Spanish in high school or more than one year in college
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35 (required with separate answer sheets)

ORLEANS-SOLOMON LATIN PROGNOSIS TEST, FORM A

Provides a means of determining before study is begun what success students may be expected to have in Latin. Consists of several simple Latin lessons with a test on each lesson. Gives a basis for advising high school students as to whether they should study Latin, or repeat it, if they have failed. May also be used for the classification of students entering Latin classes.

Grades: High school, before beginning Latin instruction
Time: 50 minutes; over-all time approximately an hour
Price: $3.75 per 35

HANDWRITING

AYERS HANDWRITING SCALE

One sheet, 9"x36" for use in grades 2-8.
Price: $ .40 each

HANDWRITING FOR LEFT-HANDED CHILDREN

Price: $1.05 per copy

HEALTH

KILANDER HEALTH KNOWLEDGE TEST, FORM AM

A measure of knowledge and understanding of matters pertaining to health. The test includes questions on personal health, community health

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and sanitation, nutrition, safety and first aid, and mental and emotional health. Although intended primarily as a measure of achievement in a course in health instruction, it may be used also to measure health knowledge resulting from other courses or obtained incidentally. An answer sheet is required for each student—they may be hand or machine scored with the stencil in the package.

Grades: 9-12
Time: 40 minutes
Price: $3.85 per 35
Answer sheets: $1.50 per 35

HISTORY

COOPERATIVE AMERICAN HISTORY TEST, FORM Z

This test samples the wide range of material covered in secondary school and college survey courses in American history. On the secondary school level it is particularly suitable for college preparatory students. It measures primarily the student's knowledge of basic facts and trends in the economic, social, and political development of the United States. Separate answer sheets may be used, but are not required except for machine-scoring.

Grades: High school and elementary college
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencil, $ .35 (required with separate answer sheets)

COOPERATIVE WORLD HISTORY TEST, FORMS Y or Z

This test measures acquaintance with major political, social, and economic trends from prehistoric times to the present. Students are asked to exercise broad time perspective and to show an understanding of basic historical developments. Considerable emphasis is given to the twentieth century. This test is an especially useful measure of end-of-course achievement of superior senior high school classes in world history. Separate answer sheets are optional.

Grades: High School classes in world history
Time: 40 minutes
Price: $3.60 per 25
Answer sheets $1.25 per 25
Stencils $ .35 each

CRARY AMERICAN HISTORY TEST, FORMS AM or BM

An end-of-year test which measures not only knowledge of important historical facts, such as dates, laws, treaties, etc., but also understanding

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of historical processes, ability to interpret historical data, map skills, and reasoning by inference. Important aspects of political, social, economic, diplomatic, military, and cultural history are covered. Separate answer sheets are required for each student. Scoring key comes in the package.

Grades: End-of-course
Time: 40 minutes
Price: $3.85 per 35
Answer sheets, $1.50 per 35

CUMMINGS WORLD HISTORY TEST, FORM AM

A measure not only of factual knowledge of world history, but also of understanding of the great movements and social trends that have taken place in the development of civilization. The first 45 items are factual questions on major historical events, dates, places, and leaders. The remaining 35 items cover important aspects of the history of ancient times, medieval and modern Europe, and the two World Wars. Separate answer sheets are required for each pupil. Scoring key comes in the package.

Grades: End of typical World History Course
Time: 40 minutes
Price: $4.45 per 35
Answer sheets, $1.50 per 35

INTELLIGENCE TESTS

A.C.E. PSYCHOLOGICAL EXAMINATION FOR HIGH SCHOOL STUDENTS—1953 Edition

This test is valuable for indicating a student's mental abilities and the caliber of school achievement that might be expected from him. The part scores have immediate value in both academic and vocational guidance, and the results are meaningful to colleges when presented as a part of the applicant's high school record.

The examination has two distinct parts: Linguistic (yielding the L-score) and Quantitative (yielding the Q-score). The L-score is indicative of ability to succeed in those fields which require proficiency with language and facility of expression. The Q-score measures ability to deal with the type of material covered in technical curricula. Package contains 25 tests and Manual of Directions only. Answer sheets and scoring stencils must be ordered separately. An answer sheet is required for each pupil tested.

Grades: 9-12
Time: 55 minutes
Price: $3.70 per 25
Answer sheets, $1.25 per 25
Scoring stencil, $ .60 each

See page 8 for ordering procedure

A.C.E. PSYCHOLOGICAL EXAMINATION FOR COLLEGE FRESHMEN—1954 Edition

This examination is especially designed for the appraisal of scholastic aptitude, or general intelligence, with reference to the requirements of most college curricula. The test has two distinct parts: Linguistic (yielding the L-score) and the Quantitative (yielding the Q-score). The L-score measures ability to deal with the type of material covered in technical curricula. Separate and composite scores are readily obtainable. A separate answer sheet is required for each student and separate stencils are necessary.

Grades: College freshman
Time: 60 minutes
Price: $3.95 per 25
Answer Sheets: $1.25 per 25
Scoring stencil: $ .60

AGE AND I.Q. CALCULATOR (see AIDS TO SCHOOL ADMINISTRATORS SECTION)

ARMY GENERAL CLASSIFICATION TEST—Civilian Edition, FORM AH (hand-scoring) or AM (machine-scoring)

This intelligence test measures general learning ability and helps predict success in many school courses and industrial occupations. Scores can also be used to predict scholastic and college success. It is an especially useful and helpful group intelligence test because it covers a wide range of ability, includes a broad sampling of different types of ability and provides a good balance between these abilities. It was first developed for service men and women and revised for civilian use. A carbon answer pad, for the AH booklets, or a machine answer sheet, for the AM booklets, must be ordered for each student. No carbon answer pad comes with the booklet.

Grades: High school and college
Time: 50 minutes
Price: Reusable booklets, AH or AM, $ .60 each
Self-scoring pin-punch carbon answer pads for AH, $2.40 per 20
Machine answer sheets for AM, $ .06 each
Machine stencil, $1.05 per set
Manual, $ .30 each

CALIFORNIA TEST OF MENTAL MATURITY—1957 EDITION (LANGUAGE AND NON-LANGUAGE)—LONG FORM

This test is made up of several sub-tests arranged under the headings of memory, spatial relations, logical reasoning, numerical reasoning, and verbal concepts. The test yields both mental ages and intelligence quo-

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tients for the language and non-language sections and for the total test. The levels Elementary through Advanced may be hand or machine-scored. Booklets become reusable when either the separate hand-scoring Scoreze or the machine-scoring answer sheets are used. The machine answer sheets may also be hand-scored. No key is needed with the Scoreze, but a set of stencils must be used for scoring the machine sheets, either by hand or machine. Separate answer sheets are optional.

Pre-Primary Series
Grades: Kindergarten-1
Time: 2 periods of 45 minutes each
Price: $5.85 per 35

Primary Series
Grades: 1-3
Time: Same as above.
Price: Same as above.

Elementary Series
Grades: 4-8
Time: Same as above.
Price: Same as above.

Scorezes:
Language, $ .10 each
Non-Language, $ .10 each
Machine answer sheets:
Language, $ .06 each
Non-Language, $ .06 each
Machine stencils, $ .70 per set
Hand stencils, $ .50 per set (for use with machine sheets)

Junior High Series
Grades: 7-9
Time: Same as above.
Price: Same as above.

Secondary Series
Grades: 9-13
Time: Same as above.
Price: Same as above.

Advanced Series
Grades: Superior 10, college and adult
Time: Same as above.
Price: Same as above.
Extra accessories: Manuals, $ .30
Keys, $ .10
Class records, $ .10

See page 8 for ordering procedure

CALIFORNIA SHORT-FORM TEST OF MENTAL MATURITY—1957 Edition

The seven sub-tests give scores in four components, namely; spatial relations, logical reasoning, numerical reasoning, and verbal concepts. The test yields both mental ages and intelligence quotients for the language and non-language sections and for the total test. Answer sheets are optional.

Hand-E-Score Templates. A new accessory designed to cut in half the time needed to hand-score the pre-Primary and Primary levels of the California Short-Form Mental Maturity tests. It consists of cardboard templates for each page, cut out to reveal the location of only the right answers. Counting the number of correct answers is therefore accurate, easy and rapid. Every person scoring these two levels of this test will be saved considerable work when Hand-E-Score is used. ORDER BY LEVEL.

Pre-Primary Series
Grades: Kindergarten-1
Time: 50 minutes
Price: $3.55 per 35
Hand-E-Templates, $ .75 set

Primary Series
Grades: 1-3
Time: Same as above
Prices: Same as above

Elementary Series
Grades: 4-8
Time: Same as above
Price: Same as above for tests
Scorezes, $ .10 each (Elementary and higher levels)
Machine answer sheets, $ .06 each (Elem. and higher levels)
Machine stencils, $ .50 per set
Hand stencils, $ .30 per set (for use with machine sheets)
Extra accessories: Manuals, $ .30 each
Keys, $. 10
Class records, $ .10
Profiles, $ .04 each (Elementary and higher levels)

Junior High Series
Grades: 7-9
Time: Same as above
Price: Same as above

Secondary Series
Grades: 9-13
Time: Same as above
Price: Same as above

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Advanced Series
Grades: Superior 10, college and adult
Time: Same as above
Price: Same as above

DAVIS-EELLS TEST OF GENERAL INTELLIGENCE OR PROBLEM-SOLVING ABILITY

A group test of general intelligence in which intelligence is defined specifically in terms of problem-solving ability in realistic problem areas. Material is presented entirely verbally. There are no reading requirements. The method of administering stresses a "game" rather than a "test" atmosphere. The Manual, which comes separately, is designed particularly for directors of research and supervisory personnel.

Primary Test, Form A
Grades: 1 and 2
Time: Grade 1, two 30 minute periods
Grade 2, three 30 minute periods
Price: $3.00 per 35
Manuals, $1.00 (all levels)

Elementary Test, Form A
Grades: 3-6
Time: Two 50-60 minute periods
Price: $5.50 per 35

DETROIT BEGINNING FIRST-GRADE INTELLIGENCE TEST, Revised, FORM A

A non-reading group intelligence test consisting of ten short sub-tests.
Grades: Beginning first grade
Time: 30-35 minutes
Price: $3.10 per 35

DETROIT ADVANCED FIRST-GRADE INTELLIGENCE TEST, FORM A

A non-reading group intelligence test.
Grades: Middle to end of first grade and beginning second grade
Time: 30-35 minutes
Price: $3.10 per 35

DETROIT KINDERGARTEN TEST, FORM A

An individually-administered intelligence test.
Grades: Beginning kindergarten
Time: 7-12 minutes
Price: $2.60 per 35

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HENMON-NELSON TEST OF MENTAL ABILITY, FORM A

Each test consists of 90 items arranged in order of difficulty. Although maintaining the same number of items as the previous edition, each test in the revision covers a range of only 4 grades instead of 6. There is a 1-grade overlap, provided between each of the three tests. Scoring is easy and rapid by a carbon in the self-marking device. When ordering specify level.

Grades: Elementary, 2-6
Junior High, 6-9
High School, 9-12
Time: 30 minutes
Prices: $4.20 per 35
Extra manuals, $ .40 each
Extra class records, $ .12 each

JENSEN I.Q. DIAL (see AIDS TO SCHOOL ADMINISTRATORS SECTION)

GOODENOUGH INTELLIGENCE TEST

A non-verbal test of mental ability, suitable for use either as a group test or as an individual test. Estimates of mental ability are based on characteristics of the subject's drawing of a man. Especially useful for children with language handicaps or with unusual backgrounds. Directions for administration and interpretation of the test are in the author's book, Measurement of Intelligence by Drawings.

Grades: Ages 4-10
Time: No time limit
Price: Drawing Sheets, $1.65 per 35
Measurement of Intelligence by Drawings, $3.30 per copy

KUHLMANN-ANDERSON INTELLIGENCE TEST

Sixth Edition of a long-established measure of general learning ability. Median mental age method of scoring used, thus eliminating the undue significance of zero and maximum scores on parts. There are 39 tests arranged in nine overlapping scales (10 tests at each grade level) adapted to school classes.

Grade level is indicated for testing normal classes early in the year: for superior pupils or second-semester testing, use next higher level.)

Time: actual working time 20-30 minutes
Price $3.60 per 25
Master Manual (contains essential data as well as copies of each test page and all directions, $2.65)
Handbook (contains essential data from the manual, but without reproductions of the test pages and directions, $ .45)

See page 8 for ordering procedure

Specify booklet by Letter

Booklet Title	Age	Usual Grade
K	5-8	Kgn: 1-A
A	6-1	1
B	7-3	2
C	8-4	3
D	9-4	4
E	10-7	5
F	11-9	6
G	13-2	7-8
H	16-0	9-12

KUHLMANN-FINCH INTELLIGENCE TESTS

A test of general mental development comprising 9 test booklets for use in grades from Kindergarten through high school; a measure of intellectual power rather than speed. Easily scored. Booklets for grades 5 through Senior High are reusable if separate answer sheets are used; but their use is optional. Separate answer sheets are not available for Tests I, II, III, and IV. The manual contains complete directions for all grade levels. This test now has the Kwik-Chek carbon answer sheets which requires no key for scoring. They are made for all levels from test IV up.

Grades: **Kindergarten and beginning 1st, I, II, III, IV, V, VI, Jr. Hi, Sr. Hi** (numbers correspond to grade level).

Time: Five 5-minute sub-tests in each test

Prices: $3.00 per 25

Kwik-Chek carbon answer pads, $5.50/50 or .11 each

Machine answer sheets, $1.25 per 25

Machine stencils, $ .30 each

Hand stencils, $ .30 (for use with machine sheets)

Directions for scoring separate answer sheets $ .15 (specify hand or machine)

Manuals, $1.30 each (all levels)

METROPOLITAN READINESS TEST, FORMS R or S

A measure of children's maturity or readiness to undertake ordinary first-grade work. The results are useful in indicating which pupils are likely to profit from formal instruction in reading, number work, etc. and which pupils will require additional training before they are ready for such work. The content is entirely pictorial.

Grades: End of kindergarten and beginning of first grade

Time: About 60 minutes

Price: $4.70 per 35

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OHIO STATE UNIVERSITY PSYCHOLOGICAL TEST, FORM 21

This power test of intelligence measures scholastic aptitude and reading comprehension ability. Total score on this scholastic aptitude test is a very valid predictor of college success. A separate reading comprehension score is also provided. High School Counselors will find it useful when advising students on college plans. College personnel workers can use for counseling, screening and admissions.

Range: High school, college
Time: 2 hours
Prices: Booklets, $.55 each
Self-scoring pin-punch answer pads, $2.40/20
Manual, $.35 each

OTIS CLASSIFICATION TEST, Revised

Includes Otis Quick-Scoring Mental Ability BETA.
(See BATTERIES)

OTIS QUICK-SCORING MENTAL ABILITY TESTS:

New Edition, Short Form

The new forms are shorter, but yield results directly comparable to the longer ones. The Alpha Test (short form) is half verbal and half nonverbal. Separate answer sheets are optional, but available for the Beta and Gamma Tests and may be hand or machine scored with the separate machine key.

Alpha Test, Form AS
Grades: 1-4
Time: 25 minutes
Price: $2.90 per 35
Beta Test, Forms EM or FM
Grades: 4-9
Time: 30 minutes
Price: $3.00 per 35
Machine answer sheets, $1.35 per 35
Machine stencils, $.25 each
Gamma Test, Forms EM or FM
Grades: high school and college
Time: 30 minutes
Price: $3.00 per 35
Machine answer sheets, $1.35 per 35
Machine stencils, $.25 each

OTIS QUICK-SCORING MENTAL ABILITY TESTS, Long Form

A series of group intelligence tests that give reliable results with a great saving of time in giving and scoring. They are self-administering except for the verbal test of Alpha.

See page 8 for ordering procedure

Alpha Test, Forms A or B
Grades: 1-4
Time: 20 minutes
Price: $3.45 per 35

Beta Test, Forms A or B
Grades: 4-9
Time: 30 minutes
Price: $2.50 per 35

OTIS SELF-ADMINISTERING TESTS OF MENTAL ABILITY

Group intelligence tests that are widely used because of their ease of administering and scoring, the variety of test material, and the simple method of obtaining IQ's.

Intermediate Examination, Forms A, B, or D
Grades: 4-9
Time: Either a 20- or 30-minute time limit may be used
Price: $2.45 per 35

Higher Examination, Form D
Grades: 9-12 and college
Time: Either a 20- or 30-minute time limit may be used
Price: $2.40 per 35

PINTNER GENERAL ABILITY TESTS: NON-LANGUAGE SERIES

A group test of general intellectual ability that utilizes no verbal situation, measures mental functions independently of word knowledge and facility, and may be administered in pantomime without the use of language.

Intermediate Test, Forms K or L
Grades: 4-9
Time: 50 minutes
Price: $5.55 per 35

PINTNER GENERAL ABILITY TESTS: VERBAL SERIES

Four batteries of mental tests that fulfill modern requirements for a complete series of group tests of general mental ability at all levels, measuring a variety of aspects of general mental abiltiy.

Pintner-Cunningham Primary Test is entirely oral. **Forms A, B, or C**
Grades: Kindergarten - 2
Time: 25 minutes
Price: $3.30 per 35

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Pintner-Durost Elementary Test

Scale 1, Picture Content, Forms A or B
Grades: 2-4
Time: 45 minutes
Price: $4.55 per 35
Scale 2, Reading Content, Forms A or B
Grades: 2-4
Time: 45 minutes
Price: $3.50 per 35

Pintner Intermediate Test, Forms A or B
(semi-self-administering)
Grades: 4-9
Time: 45 minutes
Price: $4.00 per 35
Answer sheets, $1.80 per 35
Machine stencils, $ .50 per set (necessary with separate sheets)
Manual for Interpreting, $ .35

Pintner Advanced Test, Forms A or B
Grades: 9 and above
Time: 55 minutes
Price: $4.00 per 35
Answer sheets, $1.80 per 35
Machine stencils, $ .50 per set (necessary with separate sheets)
Manual for Interpreting, $ .30

COOPERATIVE SCHOOL AND COLLEGE ABILITY TESTS—Form A

The SCAT series has been developed to help teachers, counselors and students estimate the capacity of individuals to undertake the academic work of the next higher school level. The tests are measures of developed ability, indicative of the relative academic success the student is likely to achieve in his next steps up the educational ladder.

Each test booklet in the SCAT series contains four relatively short subtests or parts. Two of these subtests, Parts I and III, are measures of developed ability in skills closely related to student success in the verbal kinds of school learning. The total number of right answers on these two parts is converted into a Verbal Score. The two other subtests, Part II and IV, are measures of ability in certain quantitative skills of number manipulation and problem solving. These two parts yield a Quantitative Score. The kinds of material in the four parts of the test are as follows:

Part I - 30 sentence-completion tasks
Part II - 25 numerical computation tasks
Part III - 30 vocabulary tasks
Part IV - 25 numerical problem-solving tasks
Level V has 25 tasks in each of the four parts.

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Separate answer sheets are required,—they may be hand or machine scored. Directions are packaged with the tests, but the Manual for Interpreting Scores must be ordered separately.

Specify Level

Level 5. grades 4, 5, 6
4. grades 6, 7, 8
3. grades 8, 9, 10
2. superior 9, 10, 11, 12
1. superior 12, college freshmen and sophomores

Time: 70 minutes,—can be divided into two 45 minute periods
Price: $4.80 per 20
Answer sheets, $1.25 per 20
Stencils, $ .55 each
Manual for Interpreting, $1.25
Student Profile sheets - $ .55 per 20
Norms: Fall norms for grades 4-14. Each converted score is presented as an interval bounded by two percentile ranks, insuring more realistic interpretation of a test score.

SRA PRIMARY MENTAL ABILITIES—for AGES 5 to 7

This battery provides scores for five basic components of intelligence: verbal-meaning, quantitative, space, perceptual speed, and motor. At some time after the 5-7 age level, numerical and reasoning abilities evolve from the quantitative ability measured by this battery. A general ability quotient comparable to the I.Q. is also provided. It is a good indicator of reading readiness, and ability to enter first grade. All problems are pictorial; all directions are oral. No reading is required.

Grades: Kindergarten-2
Time: One hour, or two half-hour periods
Price: $3.05 per 20 (are also sold separately)
Manual, $ .30—not included with booklets

SRA PRIMARY MENTAL ABILITIES—for AGES 7 to 11

Five basic learning aptitudes are measured by this test: verbal-meaning, space, reasoning, perception, and number. A Total Score and a Total Non-Reading Score provide two evaluations of general ability. Its unique reading and non-reading tests for verbal-meaning and reasoning are especially useful in the study of reading ability and reading capacity. In general, the test provides information useful in predicting general learning rate, the kinds of school work the pupil can do easily, and the subject areas that may be difficult. The booklet does not have an answer pad attached—they must be ordered separately.

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Grades: 2-6
Time: one hour, or two half-hour periods
Price: Reusable booklets, $ .60 each
Self-scoring carbon answer pads, $2.40 per 20
Interpretation folder (age and quotient scores), $1.00 per 20
Manual, $ .30 each
Technical supplement, $ .30 each

SRA PRIMARY MENTAL ABILITIES—for AGES 11 to 17

Here is a measure of five primary mental abilities: verbal-meaning, space, reasoning, number and word-fluency. Schools using this test can convert the Total Score to a general ability quotient comparable to the I.Q. Self-interpreting profiles are provided to help teachers and counselors understand students' strengths and weaknesses. Students themselves can use the profiles to increase self-understanding, and to plan educational and vocational activities. The booklet does not have an answer pad attached—they must be ordered separately.

Form AH (Hand-scoring)
Grades: junior and senior high and adult
Time: 40 to 45 minutes
Price: Reusable booklets, $ .60 each
Self-scoring carbon answer pads, $2.40 per 20
Profiles, $ .70 per 20
Manual, $ .30 each

Form AM (Machine-scoring
Grades: junior and senior high and adult
Time: 40 to 45 minutes
Price: Reusable booklets, $ .55 each
Machine answer sheets, $ .06 each
Machine stencils, $3.05 per set
Profiles—same as for AH
Manuals—same as for AH

TERMAN-McNEMAR TEST OF MENTAL ABILITY, FORMS C or D

Particularly stresses verbal components of intelligence. There are seven sub-tests: Information, Synonyms, Logical Selection, Classification, Analogies, Opposites, and Best Answer. Scoring is simplified. May be hand- or machine-scored. Separate answer sheets are required only for machine-scoring, but they may be hand-scored with the key that comes in the package.

Grades: 7-12 and college freshmen
Time: 40 minutes
Price: $3.65 per 35

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Answer sheets, $1.65 per 35
Machine stencils, $ .25 set

TESTS OF GENERAL ABILITY, SRA (TOGA)

These TOGA tests are intelligence tests for use at all elementary and high school grade levels. Test items are entirely pictorial in order to provide fair measures of mental ability for all pupils—including those who cannot read well or who are deficient in arithmetic skills. TOGA is a fair measure for the child who has been poorly prepared in school or who has missed parts of his educational experience.

Each test is divided into two parts which contain two different types of test questions:

PART I—Verbal-cultural. Here test items are based on the child's total experience—his familiarity with the world around him. He will draw upon his accumulated experience gained at home, in the school, in social groupings; from radio, TV, and books. Part I will also test his total knowledge of American culture, science, social studies, general world affairs, and the arts.

PART II—Reasoning-non-cultural. This section is comprised entirely of test items made up of geometric designs which test the student's powers of abstract reasoning. Part II offers an equal challenge no matter what the student's cultural environment; the child from a low socio-economic background can achieve as highly on this test as the student from a high socio-economic background.

TOGA norms give 2 scores: Norms for the Test of General Ability are equated to the norms for the SRA Achievement Series and the Iowa Test of Educational Development. Each pupil's test is scored for his "Grade Expectancy"—a score that can be compared directly with his "Grade Equivalent" on achievement tests. In addition to the "Grade Expectancy" score, the tests also provide an IQ for each child.

Time: 35-45 minutes
Range: Grade Levels (4-6) (6-9) (9-12) ORDER BY LEVEL
Prices: Test booklets, $4.05/20
Answer sheets, $ .06 each
Scoring stencil, $ .60 each
Manual, $ .30 each

INTEREST INVENTORIES

KUDER—OCCUPATIONAL—FORM D

This new Kuder test measures the relationship of preferences to specific jobs. Kuder D is used in high schools and colleges: to give students information concerning occupations within which their interests lie; to confirm specific occupational choices so that appropriate educational decisions can be made.

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Separate scores, or occupational keys, are provided for specific jobs. At present they are provided for 42 specific occupations (listed below). A Verification Key provides a check on the reliability of the subject's answer.

Range: High school and college
Time: 20 to 30 minutes
Prices: Booklets, $ .55 each
Answer sheets, $6.50/100
Manual, $ .60 each
Keys (specify title), $1.05 each

Occupational Scoring Keys for hand or machine:

#0 Verification	22 Lawyer
1 County Agriculture Agent	23 Retail Clothier
2 Electrical Engineer	24 Insurance Agent
3 Farmer	25 Dentist
4 Forester	26 Veterinarian
5 Minister	27 Industrial Engineer
6 Newspaper Editor	28 Pediatrician
7 Physician	29 Psychiatrist
8 Psychologist—Clinical	30 Radio Station Manager
9 Psychologist—Industrial	31 Interior Decorator
10 YMCA Secretary	32 High School Counselor
11 School Superintendent	33 High School Science Teacher
12 Accountant	34 High School Mathematics Teacher
13 Meteorologist	35 Chemist
14 Personnel Manager	36 Mining & Metallurgical Engineer
15 Department Store Salesman	37 Druggist
16 Psychologist—Professor	38 Job Printer
17 Civil Engineer	39 X-Ray Technician
18 Mechanical Engineer	40 Bank Cashier
19 Psychologist—Counseling	41 Pharmaceutical Salesman
20 Journalist	42 Librarian
21 Architect	

KUDER PREFERENCE RECORD—PERSONAL, FORM A

Measures preference for five different personal and social activities. It tells the kinds of relations the student prefers with other people. Measures preference for *working with ideas, being active in groups, avoiding conflicts, directing others,* and *being in familiar and stable situations.*

Grades: 8-12
Time: 40 minutes
Prices: Reusable booklets, $ .60 each
Self-scoring pin-punch answer pads, $2.55 per 20
Profile sheets: Boys and girls, $ .75 per 20
Men and Women, $ .75 per 20
Profile Leaflets, $1.00 per 20 (for A and C)
Manuals: $ .35 each

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KUDER PREFERENCE RECORD—VOCATIONAL, FORM B (Nine Scale)

This vocational form measures nine broad areas of education and vocational interests: mechanical, computational, scientific, persuasive, artistic, literary, musical, social service, and clerical. It does not include the outdoor scale, the verification score or the glossary that appear in Form C.

Grades: Same as CH
Time: 40 minutes
Price: Same as CH

KUDER PREFERENCE RECORD — VOCATIONAL, FORMS CH or CM (Eleven Scale)

This vocational form measures ten broad areas of education and vocational interest: *outdoor, mechanical, computational, scientific, persuasive, artistic, literary, musical, social service,* and *clerical.* A special verification score helps identify those who have not followed directions or have answered carelessly. The test consists of 168 groups of three activities. Students mark the activity they prefer most and the one they like least in each group. The Preference Record is self-administering, and self-interpreting profiles are available. The manual (which must be ordered separately) lists suggested occupations for each interest area and combination of two interest areas. Please note that no answer pad comes in booklet.

Grades: High School and college
Time: Approximately 40 minutes
Price: **FORM CH (Hand-Scoring)**
Reusable record booklets $ .60 each
Pin-Punch answer pads; $2.55 per 20
Profiles, $ .75 per 20
Manuals, $ .35 each
Extra pins, $1.00 per 20

FORM CM (Machine-Scoring)
Reusable booklets, $ .55 each
Machine answer sheets, $ .06 each
Machine keys, $7.55 per set of 22
Profiles and manuals, Same as CH

OCCUPATIONAL INTEREST INVENTORY

Designed to aid in discovering the basic occupational interests possessed by an individual in order that he may more intelligently plan a program that will result in his being a successful employee or a competent student. The fields of interest identified are: Personal-Social, Natural, Mechanical, Business, The Arts, and the Sciences. The Inventory also identifies three types of interests—Verbal, Manipulative, and Computational and gives a

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measure of the student's level of interest. In the latter he learns whether he enjoys occupations requiring simple routine and unskilled activities or occupations involving originality, inventiveness and professional skill. Can be answered in the booklet or on separate answer sheets.

Grades: Intermediate for Junior High
Advanced for Senior High
Time: No limit but can be given in 30-40 minutes
Prices: $5.45 per 35
Separate answer sheets $ .06 each
Hand Stencil for use with the answer sheet $ .85 per set
Machine Stencil $1.00

WHAT I LIKE TO DO (An interent Inventory for Lower Grades)

Identifies youngsters' preferences in eight interest areas. Teachers can utilize this knowledge to stimulate pupils to learn. The scores help in planning suitable instructional activities and in guiding and counseling. Items have been carefully selected to include the most typical and important in-school and out-of-school activities of children in this age range.

Range: Grades 4-7
Time: About 1 hour
Prices: Booklets, $3.10/20
Answer sheet, $5.25/100 (hand or machine scorable)
Manual, $ .30 each
Teacher's Handbook, $ .60 each
Scoring stencil, $1.60 set

LITERATURE

CENTER-DUROST LITERATURE ACQUAINTANCE TEST, FORM AM

A measure of acquaintance with books worth reading. The test contains 65 test items based on stories, poems, and plays found in the recommended Reading List of the National Council of Teachers of English. In each item the student is asked to choose from three titles the one from which a selected excerpt or episode comes. A separate answer sheet is required for each student, and is scored with the key in the package.

Grades: 11-12
Time: 40 minutes
Price: Test Booklets, $4.10 per 35
Separate answer sheets, $1.50 per 35

MATHEMATICS

ANALYTICAL SCALES OF ATTAINMENT IN ARITHMETIC. FORM A

Measures separately quantitative relationships, arithmetic vocabulary, fundamental operations of arithmetic, and ability to solve problems. ORDER BY DIVISION

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Range: Division 1 is for grade 4
2 is for grades 5 and 6
3 is for grades 7 and 8
Price: $1.85/25

BASIC SKILLS IN ARITHMETIC TESTS, FORM A

Fundamental arithmetic skills, including problems involving whole numbers, fractions, decimals, and percentages are measured by this test. Results help determine group and individual instructional needs. They can also be used for counseling and selection of students for enrollment in courses requiring arithmetical background. Diagnostic class record sheets must be ordered separately.

Grades: 6-12
Time: About 45 minutes
Price: Test Booklets $2.05 per 20
Diagnostic Class Record sheets— $ .15 each

BLYTH SECOND-YEAR ALGEBRA TEST, FORM AM

Measures competence in the basic skills of algebraic facts and concepts. The 55 items include problems and exercises on symbolic expression, factoring, radicals, exponents, logarithms, simple progressions, linear and quadratic equations, and graphic methods. Answers may be recorded in the test booklet or on separate answer sheets, and the books, reused.

Grades: End of typical second-year algebra course
Time: 45 minutes
Price: $3.65 per 35
Answer sheets, $1.50 per 35

BRESLICH ALGEBRA SURVEY TEST, FORM A

The First Semester Test is used at the end of the first semester to determine how much algebra the pupils have assimilated and where the work needs to be strengthened for individuals and for classes. Consists of six parts: Part I—Algebraic Concepts; Part II—Changing Algebraic Expressions to Simpler Forms; Part III and Part IV—Solving Equations and Deriving Equations from Problems; Part V—Formulas and Graphs; Part VI—Factoring.

Time: 41 minutes
Price: $3.20 per 35

The Second Semester Test, used at the end of the second semester, consists of six parts: Part I—Algebraic Concepts; Part II—Algebraic Processes; Part III—Solving Equations; Part IV—Problems; Part V—Fractions; Part VI —Functional Relationships.

Time: 52 minutes
Price: $3.20 per 35

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BRUECKNER DIAGNOSTIC ARITHMETIC TESTS

Purpose of these tests is to determine what mistakes pupils make and why they make them. Each test covers the four fundamental processes. Being truly diagnostic no norms are offered. The emphasis is upon type, frequency and cause of error. Individual Diagnostic Sheets show what remedial work is needed—not available for Decimals.

Range: **WHOLE NUMBERS** is for grades 4-8
FRACTIONS is for grades 5-8
DECIMALS is for grades 5-8
Prices: Tests, $2.00/25
Individual Diagnostic Sheets, $1.30/25 (Specify)
Manual, $1.00 each (Specify)

CALIFORNIA ALGEBRA APTITUDE TEST

A test useful for predicting a pupil's probability of success in high school algebra courses. The test score yields a predictive index which is strengthened when weighted with an intelligence score.

Grades: Junior and senior high school
Time: One class period
Price: $2.30 per 25

CALIFORNIA ARITHMETIC TEST

The following tests are identical with the corresponding parts of the complete California Achievement Test Batteries. Each form is divided into two major tests, Arithmetic (or Mathematics) Reasoning, and Arithmetic (or Mathematics) Fundamentals. The major tests are in turn divided into three, four, or five sections giving part scores for diagnostic purposes. Booklets are reusable when either the separate hand-scoring Scoreze or machine-scoring answer sheets are used. The machine answer sheets may also be hand-scored. No key is needed with the Scoreze but a set of stencils must be used for scoring the machine sheets, either by hand or machine. Separate answer sheets are optional.

Lower Primary, Forms W or X
Grades: 1-2
Price: $3.15 per 35

Upper Primary, Forms W or X
Grades: 3 and L4
Price: $3.15 per 35

Elementary, Forms W or X
Grades: 4-6
Price: $3.15 per 35

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Scoreze, $.10 each
Machine answer sheets, $.06 each
Machine stencil, $.70
Hand stencils, $.25 (for use with machine sheets)

Junior High, Forms W or X
Grades: 7-9
Prices: Same as Elementary

Advanced, Forms W or X
Grades: 9-14
Prices: Same as Elementary

COOPERATIVE ALGEBRA TEST. ELEMENTARY ALGEBRA THROUGH QUADRATICS

The problems included in this test are all multiple choice and include both formal and word types. The test is especially useful for measuring achievement at the end of the course. Separate answer sheets may be used, but are required only for machine scoring.

Grades: High school classes in elementary algebra.
Time: 40 minutes
Price: $3.35 per 25
Answer sheets, $1.25 per 25
Stencils, $.35 each
Manuals, $.30 each

COOPERATIVE MATHEMATICS TEST FOR GRADES 7, 8, 9

Consists of four parts: 1) Skills; 2) Facts, Terms and Concepts; 3) Applications; and 4) Appreciation.

The questions cover basic arithmetic processes in both formal and word problems as well as the meanings of common quantitative terms and expressions. Some simple concepts of algebra and geometry are utilized. Primarily measures growth in the fundamentals of mathematics and identifies relative strengths and weaknesses. Separate answer sheets are not required, but may be used.

Time: 80 minutes
Price: Test booklets $3.95 per 25
Answer sheets $1.25 per 25
Stencil for use with separate answer sheet: $.35 per set

DAVIS TEST OF FUNCTIONAL COMPETENCE IN MATHEMATICS, FORM AM

This test is based on the essentials for functional competence in mathematics as outlined by the Commission on Post-War Plans of the National

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Council of Teachers of Mathematics. The different sections of the test measure specifically the following areas: Consumer Problems; Graphs and Tables; Symbolism, Equations, etc.; Ratio, Tolerance, etc. Answer sheets are required and can be either hand or machine scored with the key that comes in the package.

Grades: 9-13
Time: Two 40 minute periods
Price: $4.45 per 35
Answer sheets, $1.50 per 35

IOWA ALGEBRA APTITUDE TEST

This index to pupil's ability to master algebra is now available in a quick-scoring form. Designed to be given before formal study of the subject. Gives an objective basis for advising pupils whether or not to elect Algebra. May also be used for sectioning pupils. Separate answer sheets are not required, but when used the booklets become reusable. No manual comes in this package—order separately in required numbers.

Time: 35 minutes
Prices: Tests $2.15 per 25
Manuals, $ .35 each
Separate answer sheets, $ .06 each
Stencils, $ .30 per set

LANKTON FIRST-YEAR ALGEBRA TEST, FORMS AM or BM

A 55 item test on the vocabulary of algebra, meaning and use of symbols, fundamental operations, formulas, equations, simple algebraic fractions, radicals, ratio, proportion, variation, graphs, trigonometric functions, and the solution of problems by the use of algebra. Separate answer sheets are required for each pupil.

Grades: End of 1st year course
Price: $3.85 per 35
Answer sheets, $1.50 per 35

LEE MAINTENANCE DRILLS AND TESTS IN ARITHMETIC

These Drills and Tests are 62 page booklets designed to meet the needs of those students who have inadequate mastery of, or need a review of, arithmetic basic skills. Twenty sets of drills and tests in mixed fundamentals are provided to cover variations of twenty of the most important processes in arithmetic. Thus. each student receives necessary review work with a minimum number of problems—a teaching situation most difficult to obtain by other means. Each Drill of ten problems is followed a few days later by a test of problems of the same type and difficulty, thus providing a constructive arithmetic program which serves the following four significant purposes:

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1. Maintenance of skills in fundamental arithmetic processes
2. Continuous diagnosis of difficulties
3. Remedial teaching on the basis of diagnosis followed by re-testing
4. Understanding his own needs and progress on the part of the student, as shown on *MY Progress Record* and the *Diagnostic Record Sheets provided in each booklet.*

Grade Seven Edition: Price: $.75 each
Grade Eight Edition: Price: same as above
High School Edition: Price: same as above

LEE TEST OF ALGEBRAIC ABILITY, FORM A

The specific uses to which the results of this test can be put are:

1. To determine whether or not a student should take algebra.
2. To aid in sectioning classes.
3. To determine various levels of ability within the class as an aid to instruction, in case conditions do not permit sectioning.
4. To discover, at the beginning of the term, pupils who are capable of doing exceptional work in algebra.
5. To provide a measure of the student's algebraic ability so that a teacher can tell whether poor work is due to lack of ability or to other factors that can be corrected.

Grades: Students beginning first-year algebra
Time: 25 minutes
Price: $3.60 per 35

MADDEN-PEAK ARITHMETIC COMPUTATION TEST, FORM AM

A reliable measure of the basic arithmetic computational skills needed by adults. Contains 73 items and yields separate scores on: Part I, Addition and Subtraction; Part II, Multiplication and Division; Part III, Common Fractions; Part IV, Decimal Fractions, Mixed Decimals, and Per Cent; Part V, Mental Computation and Estimation.

Grades: 7-12
Time: 49 minutes
Price: $3.35 per 35

METROPOLITAN ACHIEVEMENT TEST: ARITHMETIC

There are three different tests in this group. They cover both computation and problem solving.

Elementary—Form A or B
Grades: 3-4
Time: 60 minutes
Price: $3.65 per 35

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Intermediate—Form A or B
Grades: 5-6
Time: 75 minutes
Price: $3.85 per 35

Advanced—Form A or B
Grades: 7, 8, and first half of 9
Time: 75 minutes
Price: $3.85 per 35

NEW YORK TEST OF ARITHMETICAL MEANINGS

A measure of mastery of essential pre-measurement and numerical concepts. *Level One* samples concepts normally acquired before and during first grade. *Level Two,* sampling pre-measurement concepts, standard measures, and numbers and processes, is based on the arithmetic taught in the first two years of school. Content at both levels is entirely pictorial.

Level One: end of grade 1 or beginning 2
Time: two periods of 30 minutes each
Price: $4.05 per 35

Level Two: end of grade 2 or beginning 3
Time: two periods of 30 minutes each
Price: $3.35 per 35

ORLEANS ALGEBRA PROGNOSIS TEST, FORM A

The test consists of nine simple lessons, each followed by a series of questions covering algebraic principles and skills including the use of symbols, substitution of values for symbols, expression of relationships by symbols, and problem-solving. An arithmetic test and a summary test are also included. Data are presented on the extent to which scores on this test are actually predictive of success in learning first-year algebra. Detailed instructions are given for using the results for prognosis in local situations.

Grades: Before beginning algebra instruction
Time: 39 minutes; over-all administration time 45 minutes
Price: $3.65 per 35

ORLEANS GEOMETRY PROGNOSIS TEST, FORM A

A measure of abilities necessary for success in learning geometry. The test consists of several simple lessons in geometry, each followed by a series of questions covering essential skills and principles such as understanding and use of axioms, of the vocabulary of geometry, and of geometrical notation; interpretation of statements of geometrical relations; and solution of problems. Data are presented on the extent to which

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scores on the test actually predict success in geometry. Detailed recommendations are given for use of the results in light of local requirements.

Grades: Before beginning geometry instruction
Time: 39 minutes; over-all administration time 45 minutes
Price: $4.45 per 35

SCHORLING-CLARK-POTTER HUNDRED PROBLEM ARITHMETIC TEST, FORMS V or W

Designed to survey computational abilities in the basic skills of arithmetic. Each of two forms contains one hundred items, arranged in five sections—Addition, Subtraction, Multiplication, Division, and Fractions, Decimals and Per Cents. Percentile norms for total score at end of first semester, grades 8-12, separately, and at end of grade 7.

Grades: 7-12
Time: 40 minutes
Price: $2.40 per 35

SEATTLE ALGEBRA TEST, FORM AM

Measures not only knowledge and understanding of the facts of beginning algebra but also the application of acquired skills and methods. The 47 items cover understanding of basic terms; fundamental processes with signed quantities; sequence of numerical operations; practical formulas; multiplication of binomials; solution of equations of the first degree by the rules of equality; solution of a set of simple simultaneous equations; algebraic representation and problems. Separate answer sheets are required. May be hand or machine-scored with the key that comes in the package.

Grades: End of first half year of algebra
Time: 40 minutes
Price: $3.30 per 35
Answer sheets, $1.50 per 35

SEATTLE PLANE GEOMETRY TEST, FORMS AM or BM

An accurate measure of student growth and accomplishment in geometry at the end of the first half year of study. Contains 45 test items, selected on the basis of curricular validity and satisfaction of statistical requirements. Measures vocabulary of geometry, knowledge of simple geometric constuction, computational skills, and ability to reason from a figure. Separate answer sheets are required for each student and may be either hand or machine scored with the stencil that comes in the package.

Grades: End of first half year of geometry
Time: 45 minutes
Price: $3.85 per 35
Answer sheets, $1.50 per 35

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SHAYCROFT PLANE GEOMETRY TEST, FORM AM

Part A is devoted primarily to the measurement of important basic concepts and facts of geometry, while Part B measures application and reasoning on the basis of information. The 60 carefully selected items include questions on fundamental concepts, lines and rectilinear figures, the circle, proportions, area of polygons, and geometric reasoning. Separate answer sheets are required for each student and they may be either hand or machine scored with the stencil that comes in the package.

Grades: End of 1st year course in plane geometry
Time: 40 minutes
Price: $3.85 per 35
Answer sheets, $1.50 per 35

SNADER GENERAL MATHEMATICS TEST, FORM AM

A 65 item test measuring achievement of the important objectives of a general mathematics course of the type that includes material from the fields of algebra and informal geometry. The test samples the following areas: arithmetical concepts and processes, informal geometry, graphic representation, algebraic principles and skills, and numerical trigonometry. Measures not only computation and manipulation skills, but also application through problem situations. Separate answer sheets are required.

Grades: End of a one-year course in general mathematics
Time: 40 minutes
Price: $4.45 per 35
Answer sheets, $1.50 per 35

SRA ARITHMETIC, FORMS A or B

From the Achievement Series, this test is in two parts. Part I, consists of arithmetic studies, and questions about the story—there are seven arithmetic stories and problem-solving questions. Part II, is designed to show how well the students understand some important facts about arithmetic—deals with measurements, fractions, etc. An answer sheet is necessary for each student.

Grades: 6-9
Time: 1-45 minutes period and 1-25 minutes period
Price: $2.05 per 20
Answer sheets, $ .06 each
Stencils, $1.05 each

STANFORD ACHIEVEMENT TEST: ARITHMETIC

There are three different tests in the group. They cover both computation and problem solving.

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Elementary, Forms J or K
Grades: 3-4
Time: 55 minutes
Price: $2.50 per 35

Intermediate, Forms J or K
Grades: 5-6
Time: 70 minutes
Price: $3.05 per 35

Advanced, Forms J or K
Grades: 7-9
Time: 70 minutes
Price: $3.05 per 35

MUSIC

DRAKE TEST OF MUSICAL TALENT, FORMS A or B

A musical memory test adapted for use with any kind of group, with or without musical training. Measures innate musical talent and capacity of musical achievement. The booklets are needed by the examiner only. A score sheet is needed for each pupil.

Grades: All ages
Price: Booklets, $ .60 a copy
Manual of Directions, $ .55
Answer key, $ .10
Pupil's score sheet, $ .10 each

SEASHORE MEASURES OF MUSICAL TALENTS, SERIES A

These phonographically presented tests measure six aspects of auditory discrimination: pitch, loudness, time, timbre, rhythm, and tonal memory. Series A covers a wide range of difficulty and is used in guidance and selection testing. It consists of three double-faced records. May be hand or machine-scored.

Grades: 5—adult
Time: One hour
Price: $15.00 per album with 50 answer sheets, keys and manual
Answer sheets, $2.75 per 50
Scoring stencil, $ .50
Manual, $ .60

PERSONALITY AND GUIDANCE

BELL ADJUSTMENT INVENTORY—STUDENT FORM

This new form is a Special IBM answer sheet—with the questions printed on them, so that a booklet is not needed. Stencils for either hand or

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machine scoring and the manual and norms must be ordered separately.

This diagnostic aid is for guidance and counseling work with high school and college students. It provides a measure of four adjustments: Home, Health, Social, and Emotional. Scoring requires about three minutes.

Special IBM answer sheets: $4.80 per 50
Manuals: $ .30
Scoring stencils: $2.75 (either and or machine—specify)
Norms: $ .10

BELL SCHOOL INVENTORY

Locates in the minimum of time those students who are maladjusted to high school life. Easy to administer and to interpret. Requires less than 2 minutes to score. Should be given toward the end of the semester when the student is thoroughly acquainted with teachers and school conditions.

Price: $3.65 per 25

BERNREUTER PERSONALITY INVENTORY

By use of this blank, several aspects of personality are indicated at one time: neurotic tendency, self-sufficiency, introversion-extroversion, dominance-submission, sociability and confidence. May be either hand or machine-scored. Separate answer sheets required only for machine-scoring.

Grades: High school and college
Price: Inventory blanks, $4.10 per 25
Individual report sheets, $1.00 per 25
Manuals, $ .35 each
Hand keys, $1.15 per set of 6
Machine answer sheets, $ .05 each
Machine stencils, $6.15 per set of 32

CALIFORNIA TEST OF PERSONALITY

This series of group tests is designed to identify and reveal the status of certain highly important components in personality and social adjustment often referred to as intangibles. Each test is designed to provide teachers, supervisors, and administrators with significant evidences of the personal and social status of individuals and groups, and to provide a means for guiding them to better adjustment. By means of carefully validated "yes-no" responses, the tests give evidence of how students feel, think, and act regarding a wide variety of situations which vitally affect them as individuals or as members of groups. The test is divided into two sections: personal adjustment and social adjustment. All levels may be scored in the test booklet; or separate hand-scoring Scoreze pads or machine-scoring answer sheets are available for Elementary through Adult levels.

Primary, Form AA
Grades: Kindergarten—3

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Time: 50 minutes
Price: $3.55 per 35

Elementary, Form AA
Grades: 4-8
Time: 50 minutes
Price: $3.55 per 35
Scoreze, $ .10 each
Machine answer sheets, $ .06 each
Machine stencils, $ .85 per set
Hand stencils (for use with machine sheets), $ .30 per set

Intermediate, Form AA
Grades: 7-10
Time: 50 minutes
Price: $3.55 per 35
Separate Scoreze, machine answer sheets, and stencils same as Elementary

Secondary, Form AA or BB
Grades: 9—College
Time: 50 minutes
Price: $3.55 per 35
Separate Scoreze, machine answer sheets, and stencils same as Elementary

Adult Series, Form AA
Time: Same as Secondary
Price: Same as Secondary

MINNESOTA COUNSELING INVENTORY

For counselors of high school students. A new tool, based on the *Minnesota Multiphasic Personality Inventory* and the *Minnesota Personality Scale*, yielding nine scores. Three scores identify areas in which teen-agers may be adjusting particularly well or poorly: *Family Relationships, Social Relationships, Emotional Stability.* Four scores indicate students characteristic ways of meeting problems and their behavior in social groups: *Conformity; Adjustment to Reality; Mood; Leadership.*

"Questions" and "Validity" scores are provided as checks on test-taking attitude. The booklets contain 355 statements to be marked True or False as it applies to the student. The separate answer sheet can be hand or machine scored. The profile chart furnished with each answer sheet incorporates the norms so that reference to separate tables is not necessary.

Standardization, for grades 9-10 and 11-12, is based on scores of over 20,000 high school boys and girls in ten states. Is also useful for high

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school graduates and college freshmen. It should not be used with students of less than eighth grade reading ability. Order each item separately.

Prices: Booklets, $4.40 per 25
Answer sheets, $4.50 per 50
Hand keys with Manual, $ .75
Machine keys with Manual, $1.15

MOONEY PROBLEM CHECK LIST

These forms are widely used to help individuals express their personal problems. Valuable for group survey and research purposes as well as for appraisal of problems of individuals before or during counseling. They are self-administering, and for many counseling purposes require no scoring. Areas covered are health and physical development, home and family, morals and religion, sex, economic security, school or occupation, social and recreational, etc. The directness of the check-list method makes it an effective fact-finder in a wide variety of situations.

Form J
Grades: Junior high school
Time: 30 minutes
Price: $2.20 per 25

Form H
Grades: High school
Time: 30 minutes
Price: $2.20 per 25

PINTNER: ASPECTS OF PERSONALITY

An inventory consisting of three sections covering ascendance-submission, extroversion-introversion, and emotionality. An aid to the teacher in discovering problem cases.

Grades: 1-9
Time: 30 minutes
Price: $3.10 per 35

JUNIOR INVENTORY, FORM S

The Junior Inventory is a problem checklist which measures children's problems, interests and attitudes. While primarily an inventory of individual pupil problems, this measure also furnishes schools with a wealth of information for undertaking and/or evaluating their guidance and curriculum programs. A valuable guidance aid at the elementary school level—can be used as a tool to gather fundamental data regarding the nature, area, and frequency of children's problems as the children themselves see their problems. This check list not only gives the child an opportunity to indicate

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the problems he feels he has, but permits him to indicate the degree or intensity of each problem, by checking a big box for big problems, middle-sized box for middle-sized problems, small box for small problems, or a circle for no problem.

Form S yields scores in five major areas: Things in General, About Myself, Getting Along with Other People, About Me and My School, About Me and My Home.

Range: Grades 4-8
Time: About 40 minutes
Prices: Booklets, $2.10/20
Profiles, $1.10/20 (optional)
Manual, $ .60 each

SRA YOUTH INVENTORY, FORMS AH, AM, and NEW FORM S

This inventory helps identify problems that young people worry most about. Eight separate areas are covered: My School, Looking Ahead, About Myself, Getting Along with Others, My Home and Family, Boy Meets Girl, Health, and Things in General. In addition, a Basic Difficulty Key indicates which problems may be caused by serious personality difficulties. Booklets are reusable if separate answer sheets are used. No answer pad comes with either the AH or the AM booklet—they must be ordered separately.

Grades 7-12
Time: 40 minutes

Price: **Hand-Scoring edition, Form AH**
Reusable booklets, $ .60 each
Self-scoring carbon answer pads, $2.40 per 20
Basic Difficulty scoring stencil, $ .60

Machine-scoring edition, Form AM
Reusable booklets, $ .55 each
Answer sheets, $ .06 each
Stencil, $2.60 per set

For use with either Form AH or AM
Junior High profile, $1.25 per 20
Senior High profile, $1.25 per 20
Manual, $ .30 each

NEW FORM S

This new form employs the strength of response answer method. A student's response indicates his degree of reaction to a problem because he checks squares corresponding in size to his feelings. All necessary items now come in the package.

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Range: 7-12
Time: about 40 minutes
Price: Consumable booklets, $2.50/20

SURVEY OF ATTITUDES AND BELIEFS

This newly published inventory measures attitudes in three broad life areas: *Society; Education and Work; Sex, Marriage, and Family.* The self-administering 147 item form can be scored by the pupils themselves. The accompanying profile sheets contain percentile norms for the three areas. This inventory helps teachers and counselors understand pupils' opinions and beliefs. Use of the percentile norms shows how the individual's attitudes compare with those of others in his age group.

Grades: High school
Time: About 40 minutes
Price: $2.80 per 20
Profile folders, $1.25 per 20
Extra examiner's manuals, $ .30 each

THURSTONE TEMPERAMENT SCHEDULE, FORM AH

Seven different temperament traits are measured by this test: active, vigorous, impulsive, dominant, stable. sociable, and reflective.

This is not an adjustment inventory. It surveys those relatively stable personality traits important to success and satisfaction in different school curricula and occupations. Primary value of the Temperament Schedule is in assessing the ability to meet the personality requirements of school or job situations. The booklet does not have an answer pad attached. They must be ordered separately.

Grades: high school, college, adult
Time: About 15 minutes
Price: Reusable booklets, $ .55 each
Self-scoring carbon answer pads, $2.20 per 20

VINELAND SOCIAL MATURITY SCALE

Outlines performances in which the individual shows progressive capacity, under three main headings: Self-Help, Self-Direction, and Communication. An instrument for parents, teachers, counselors, social workers, clinicians, pediatricians, psychiatrists.

Range: Birthday to maturity
Price: $2.40 per 25
Manual of Directions, $1.65 each

READING

BAKER'S "IN BEHALF OF NON-READERS" (for teachers of reading)

Contains many sound and practical suggestions for work with poor readers. In simple non-technical language, it discusses the problem of

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the retarded reader and emphasizes the remedial teaching on the pre-primer, primer, elementary and secondary school levels.

Grades: For use with pupils in grades 1-6
Price: $ .90 per copy
Chart of "Educational Disability in Reading," wall size, $ .60 each

CALIFORNIA READING TEST

These tests are identical with the corresponding parts of the complete California Achievement Test batteries. Each form is divided into two major tests, Reading Vocabulary and Reading Comprehension. The major tests are in turn divided into three or four sections, giving part scores for diagnostic purposes. Booklets are reusable when either the separate self-scoring Scoreze or machine-scoring answer sheets are used. The machine answer sheets may also be hand-scored. No key is needed with the Scoreze, but a set of stencils must be used for scoring the machine sheets, either by hand or machine. Separate answer sheets are optional.

Lower Primary, Forms W or X
Grades: 1-2
Price: $2.75 per 35

Upper Primary, Forms W or X
Grades: 3-L4
Price: $3.15 per 35

Elementary, Forms W or X
Grades: 4-6
Price: $3.55 per 35
Scorezes, $ .10 each
Machine answer sheets, $ .06 each
Machine stencils, $ .50
Hand stencil, $ .25 (for use with machine sheets)

Junior High, Forms W or X
Grades: 7-9
Prices: Same as Elementary—except machine stencils are $ .55 each

Advanced, Forms W or X
Grades: 9-14
Prices: Same as Elementary
Extra Accessories:
Manuals, $ .30
Keys, $ .10
Class Records, $ .10

DIAGNOSTIC READING TEST: SURVEY SECTION, FORMS A or B

(By Committee on Diagnostic Reading Tests, Inc.: Frances Oralind Triggs, Robert M. Bear, Ralph Bedell, John V. McQuitty, George D. Spache, Arthur E. Traxler, and Frederick Westover.)

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Rate of reading, vocabulary, and textbook comprehension are the three major reading skills measured by this Survey Section of the DRT. Two equivalent forms are available. Results help locate students who need further diagnosis—or corrective or remedial work because of retarded reading skills. In addition the test will point out those with exceptional reading skills who are not challenged sufficiently by regular class work, and who deserve extra developmental attention. May be either hand or machine-scored. No separate answer sheet is necessary, but may be used—booklet then becomes reusable.

Grades: 7—college freshmen
Time: 45 minutes
Price: Booklets, $ .30 each
Directions for administering, $ .30 each
Answer sheets, $ .06 each
Fan key for hand-scoring booklets, $ .30
Stencil for scoring answer sheets, $ .35 each

DOREN DIAGNOSTIC READING TEST

The Doren test was developed especially for preventing the development of reading difficulties at the third-grade level. It measures the degree to which children have mastered the word recognition skills. Does not diagnose comprehension difficulties. By limiting its scope to the development of word recognition skills, it is detailed and specific in its diagnosis.

The test divides the basic techniques of word recognition into the child's area of development—it is direct and specific in locating causes of reading difficulty—will define the difficulty an individual is having and place a level from which his reading learning should proceed.

Especially designed for cases where the background of acquired skills is undetermined and a starting point for remedial instruction is sought. This is a group diagnostic test; no special training is needed to administer, and it is simply and directly scored.

Measures skills in letter recognition, beginning sounds, whole word recognition, words within words, speech consonants, ending sounds, blending, rhyming, vowels, sight words, discriminate guessing.

Grades: 1-4
Time: No time limit—can be given in parts
Prices: $3.30 per pkg of 15 test booklets
Manuals, $1.30 each (Must be ordered separately)

DURRELL ANALYSIS OF READING DIFFICULTY

A standard procedure for analyzing reading ability. The material consists of the wire-bound *Reading Paragraphs,* a series of standardized word lists and reading selections, together with a quick exposure device (Tachistoscope) with accompanying test cards, and carefully worked out *Individual Record Blank* for recording results in a systematic way.

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Difficulties in the following phases of reading are analyzed in detail: silent and oral reading, word analysis, phonetics, faulty pronunciation, and difficulties in writing and in spelling. The *Manual of Directions* suggests general plans for remedial teaching.

Grades: 1-6
Time: 30-45 minutes per pupil
Price: Individual record blanks, $4.00 per 35
Reading Paragraph Book, $1.55 per copy
Tachistoscope and cards, $1.35 per set
Blank cards for Tachistoscope, $1.50 per 30
Manual of Directions, $ .65 each

DURRELL-SULLIVAN READING ACHIEVEMENT TEST, FORM A

This is a group test parallel to the *Capacity Test*, and standardized on the same reading achievement. It comprises the following sub-tests: Test 1, Word Meaning; Test 2, Paragraph Meaning; and optional test of Spelling and Written Recall.

Intermediate Test
Grades: 3-6
Time: 30-35 minutes
Price: $3.75 per 35

DURRELL-SULLIVAN READING CAPACITY TEST, FORM A

This is a group test which uses the child's ability to understand spoken language as a measure of his capacity to read. It is composed entirely of pictures and consists of two sub-tests: Test 1, Word Meaning, measuring understanding of spoken words, and Test 2, Paragraph Meaning, measuring comprehension of spoken discourse.

Intermediate Test
Grades: 3-6
Time: 30-40 minutes
Price: $3.20 per 35

DURRELL-SULLIVAN READING CAPACITY AND ACHIEVEMENT TEST, FORM A

This Primary Test, covering both capacity and achievement, is made up of the easier portions of the Intermediate Test.

Primary Test
Grades: 2.5 - 4.5
Time: 40-45 minutes
Price: $4.95 per 35

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GATES ADVANCED PRIMARY READING TESTS—1958 Revision

These tests are designed to meet the needs of those readers in grade 2 for whom the GATES PRIMARY READING TESTS may be too easy and of those readers in grade 3 for whom the GATES BASIC READING TESTS may be too difficult. The tests measure level and range of ability in word recognition and paragraph reading. To provide for retesting at intervals, three equivalent forms of each type are available. All necessary accessories come in the package.

Type AWR: Word Recognition, Forms 1, 2, and 3

Type APR: Paragraph Reading, Forms 1, 2, and 3

Grades: Second half of grade 2 and grade 3
Time: 15 minutes for Type 1, 25 minutes for Type 2
Price: $1.40 per 35

GATES BASIC READING TESTS—1958 Revision

The 1958 edition of the Gates Basic Reading Tests embodies a thoroughly revised series. It contains three tests of speed and accuracy of reading, and two tests, one for *Reading Vocabulary* and one for *Level Comprehension*, not included in the earlier series.

The five tests were designed for use as a team. When all are given, a comprehensive survey of basic reading abilities is secured. The tests are, however, printed and may be purchased separately. These basic tests are suitable for average classes during the latter part of grade 3 and during higher grades up to end of grade 8. They could be given to classes of superior reading ability earlier.

Grades: 3-8
Time: 20 minutes for each test
Price: $1.40 per 35

Order by Type

TYPE GS. Reading to Appreciate General Significance, Forms 1, 2, or 3

TYPE UD. Reading to Understand Precise Directions, Forms 1, 2, or 3

TYPE ND. Reading to Note Details, Forms 1, 2, or 3

TYPE RV. Reading Vocabulary, Forms 1, 2, or 3

TYPE LC. Level of Comprehenson, Forms 1, 2, or 3

GATES-PEARDON PRACTICE EXERCISES IN READING, BOOKS III, IV, V, and VI

These booklets have as their aim the development of all-round proficiency in the five representative types of reading measured by the GATES

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BASIC READING TESTS. The exercises are designed to supplement the other reading experiences of children and are arranged to make the training as direct as possible. The examiner must have a Manual of Directions, the pupil should have one booklet of each of the four types, if all-round proficiency in reading is the aim.

Grades: Book III, 2-4, primarily for grade 3
Book IV, 3-5, primarily for grade 4
Book V, 4-6, primarily for grade 5
Book VI, 6-8
Types A, B, C, and D are published for each booklet:
A. Reading to Appreciate the General Significance of a Selection
B. Reading to Predict the Outcome of Given Events
C. Reading to Understand Precise Directions
D. Reading to Note Details
Price: Booklets, $ .40 each
Manuals, $ .30 each

GATES PRIMARY READING TESTS

This series of reading tests measures level and range of ability in the three most important aspects of reading at the early primary stage. Each of these aspects of reading is tested by a separate test. To provide for retesting at intervals, three equivalent forms of each type are available. All necessary accessories come in the package.

Type PWR: Word Recognition, Forms 1, 2, and 3
Type PSR: Sentence Reading, Forms 1, 2, and 3
Type PPR: Paragraph Reading, Forms 1, 2, and 3
Grades: 1 and first half of 2
Time: 15 minutes each for Types 1 and 2; 20 minutes for Type 3
Price: $1.40 per 35
Extra manuals, $ .30 each

GATES READING READINESS TESTS

Measures the general readiness for beginning reading. Consists of the following sub-tests: Picture Directions, Word Matching, Word-Card Matching, Rhyming, Reading Letters and Numbers. All necessary accessories come in the packages.

Grades: Kindergarten and first half of 1
Time: No time limit
Price: $2.00 per 35
Extra manuals, $ .30 each

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GATES READING SURVEY, FORMS I or II—1958 Revision

Designed to measure word knowledge or vocabulary, power or level of comprehension, speed of reading, and accuracy of interpretation. May be used coordinately with GATES BASIC READING TESTS.

Grades: 3-10
Price: $2.40 per 35
Extra manuals, $ .30 each
Extra keys, $ .10 each
Extra class records, $ .10 each

GRAY STANDARDIZED ORAL READING CHECK TESTS, SET III OR IV

A detailed analysis of the individual difficulties in oral reading may be obtained by the use of these tests. An aid to determing the nature of a pupil's difficulties and the character of training necessary to develop oral reading ability.

Grades: Set III 4-6
Set IV 6-8
Price: $3.30 per packet of 100 tests (20 of each of the five tests in set, 20 individual record sheets and 4 direction sheets).

GRAY STANDARDIZED ORAL READING PARAGRAPHS

This test is usable in all grades after the children have attained a preliminary vocabulary. Ability is checked in terms of rate of reading and in number of errors made. Children are tested individually.

Grades: 1-8
Price: $2.15 per 35

IOWA SILENT READING TESTS: NEW EDITION

A widely used battery of tests measuring several skills indispensable to effective reading of the work-study type. They are analytical, measuring rate of reading, comprehension, word meaning, and ability to use skills in locating information. No separate answer sheet is necessary except for machine-scoring. The separate answer sheet may be hand-scored with the key that comes in the package of tests.

Elementary, Forms AM, BM, CM, DM
Grades: 4-8
Time: 49 minutes
Price: $3.90 per 35
Machine answer sheets, $2.50 per 35 (specify form)
Machine key, $ .75 per set (specify form)

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Extra hand scoring keys, $ .25 (same as comes in pkg)
Extra manuals, $ .25

Advanced, Forms AM or BM
Grades: High school and college.
Time: 45 minutes
Prices: $5.30 per 35
Answer sheets and keys same as Elementary

KELLEY-GREENE READING COMPREHENSION TEST, FORM AM

An over-all measure of reading comprehension. The test provides accurate measures of three significant reading abilities: (1) ability to comprehend selections of paragraph length; (2) ability to find answers to questions, and (3) ability to retain what is read. An estimate of rate of reading may also be obtained. Each of the three subtests is sufficiently long to yield a reliable measure. A separate answer sheet must be used for each student—they are scored with the key in the package of tests.

Grades: 9-12 and college freshmen
Time: Overall about 75 minutes, but can be given in parts
Prices: $5.70 per 35
Separate answer sheets $1.80 per 35

LEE-CLARK READING READINESS TEST

A widely used instrument for determining (1) whether entering first grade pupils are ready for reading instruction and (2) the probable length of time before formal reading activities are advisable for immature children. The 1951 revision provides interesting and easily administered exercises, or test items which are designed primarily to predict probability of success in first-grade reading. The total score can be used as an aid in grouping or classifying pupils for reading instruction or into transition groups.

Grades: Kgn-1
Price: $3.55 per 35

McCALL-CRABBS STANDARD TEST LESSONS IN READING, BOOKS A, B, C, D, E

These lessons are published in five booklets, each one consisting of 78 lessons comprising selection with questions of the multiple-choice type. They help develop a rate of speed and power of comprehension exceeding that yielded by ordinary methods of teaching silent reading. They embody in practical form scientific principles of teaching speed and comprehension in silent reading, and can be used by any teacher without supervision or special training. They help pupils to comprehend varied kinds of reading materials and increase enjoyment of reading. Testing and teaching at the

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same time, they indicate a pupil's reading ability in relation to grade and age, and show his individual progress. They are scored by the pupils themselves and provide a cumulative record of each pupil.

Grades: **Book A, 2-4**
Book B, 3-5
Book C, 4-6
Book D, 5-7
Book E, 7-12
Price: Books, $ .50 each
Additional record cards, $ .05 each
Manuals, $ .30 each

METROPOLITAN ACHIEVEMENT READING TESTS

This Reading Test is lifted from the Achievement Battery and covers comprehension and vocabulary or word recognition.

Elementary, Forms A or B
Grades: 3 and 4
Time 1 hour
Price: $4.05 per 35

Intermediate, Forms A or B
Grades: 5 and 6
Time: 45 minutes
Price: $4.25 per 35

Advanced, Forms A or B
Grades: 7, 8, and beginning 9
Time: 45 minutes
Price: $4.25 per 35

MURPHY-DURRELL DIAGNOSTIC READING READINESS TEST

A measure of three abilities known to be of crucial importance in the development of early reading skill—auditory discrimination, visual discrimination, and learning rate.

Grades: Early first grade
Time: Tests 1 and 2, about one hour; Test 3, about 20 minutes of group instruction and brief individual testing at three different times subsequent to the group instruction.
Price: $3.10 per 35

READING FOR UNDERSTANDING

A series of reading comprehension exercises designed to help students to think critically about what they read. Many students read words,

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sentences, stories, but have not yet learned to recognize the inferences and logical implications to be drawn from the material. Only through concentrated practice can students improve their ability to get meaning from their reading. READING FOR UNDERSTANDING can be used in conjunction with other curriculum materials in the language arts program or for concentrated practice in reading development programs.

Lessons cover 100 graduated levels of reading difficulty. At each progressive level the student must make more intricate analyses and judgments. Gradations are determined by ability to understand what is read rather than by grade level; thus materials have a wide school use. Testing in the elementary grades has indicated that fifth grade pupils may profit from practice at levels 1-30; while college remedial classes find the materials at each of the 100 levels useful for quick and intensive review.

Replacement cards available, $2.00 per set of 40.
Range: 3-12 and college remedial classes
Materials needed:

A box of 400 cards. Price, $30.00 (4 cards for each of the 100 difficulty levels. Each card contains a short reading selection followed by exercise questions which determine how much each pupil understands of what he has read)

Student Record Book. Price, $ .30 each (each student needs a copy to keep a record of his progress. Teacher needs a copy)

Teacher's Handbook. Price, $ .75 each (provides outlined procedures for putting the program into action and background information and data from experimental and research studies.

Placement Tests. Price, $1.60/40

ROW-PETERSON READING ACHIEVEMENT TESTS— ALICE AND JERRY SERIES

These tests are based on material contained in the ALICE AND JERRY textbooks, and are used to measure the pupil's achievement at the termination of the course in which the books are used.

Preprimer Tests: is used in connection with the preprimers *Skip Along, Under the Sky, Open the Door,* and *New High on a Hill.*
Price: $1.25 per 25

Basic Primer: is used with *New Day In and Day Out.*
Price: $1.25 per 25

First Reader Achievement Test: is used with *New Round About.*
Price: $1.25 per 25

Second Reader Achievement Test: is used with *New Friendly Village.*
Price: $1.25 per 25

Third Reader Achievement Test: is used with *New If I Were Going.*
Price: $1.25 per 25

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SANGREN-WOODY READING TEST, FORMS A or B

A measure of seven aspects of silent reading ability that are generally accepted as important components of silent reading instruction

Grades: 4-8
Time: 27 minutes
Price: $3.80 per 35

SCHRAMMEL-GRAY HIGH SCHOOL AND COLLEGE READING TESTS, FORMS A or B

The three scores of this test help the teacher analyze each student's reading ability. The *gross-comprehension* score consists of the total items answered correctly on the paragraphs read. The *rate score* is a measure of the number of words read per minute for the testing period. The *comprehension-efficiency* score is a ratio between the other two scores and is indicative of efficiency in reading based on the quantity read.

Grades: 7-12 and college
Time: 25 minutes
Price: $4.25 per 35

SRA READING RECORD

Measures ten reading skills: rate, general comprehension, paragraph meaning, directory reading, map-table-graph reading, advertisement reading, index usage, technical vocabulary, sentence meaning, and general vocabulary. Total score gives an over-all reading comprehension score. Enables teachers to answer such questions as: "Is this student reading up to par for his grade?" "If he is below par, where do his weaknesses lie?" Rate score and total score can be used to classify students as superior, average, or inferior readers. The profile of specific reading skills can be used to plan reading training and to stimulate students' interest in improving these skills. The booklets do not have an answer pad attached—they must be ordered separately.

Grades: 8-13
Time: 40 minutes
Prices: Reusable test booklets, $ .60 each
Self-scoring carbon answer pads, $2.40 per 20
Profile sheets, $ .75 per 20
Manuals, $ .35 each

STANFORD ACHIEVEMENT READING TESTS

Lifted from te Achievement Battery, these tests cover comprehension and vocabulary, or word meaning.

Elementary, Forms J or K
Grades: 3-4

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Time: 35 minutes
Price: $2.50 per 35

Intermediate, Forms J or K
Grades: 5-6
Time: 40 minutes
Price: $2.50 per 35

Advanced, Forms J or K
Grades: 7-9
Time: 40 minutes
Price: $2.50 per 35

SCIENCE

ANDERSON CHEMISTRY TEST, FORMS AM or BM

A measure of the extent to which students have achieved the important objectives of a high school course in chemistry. Contains 80 test items, selected on the basis of curricular validity and satisfaction of statistical requirements. Topics included are: chemical changes; solutions, elements, compounds; symbols, equations, problems; atomic structure; ionization; organic chemistry; applications.

The test is divided into the following parts: understanding of facts and concepts; understanding and application of functional principles; understanding and application of the elements of the scientific method and the ability to use the basic skills in chemistry. Answer sheets are required. May be hand or machine-scored.

Grades: End of 1st year course
Time: 40 minutes
Price: $4.45 per 35
Answer sheets, $1.50 per 35

COOPERATIVE BIOLOGY TEST, FORM Y

This test samples the material generally covered in biology courses at high school level. The test is divided into two parts. Part I consists of single answer multiple choice questions; Part II contains reading passages and diagrams followed by questions. Emphasis is placed upon the understanding of the basic principles and the ability to use these principles to interpret materials not generally encountered in text books. Separate answer sheets may be used and may be either hand or machine-scored by using the machine stencil. Thus the booklets become reusable.

Grades: High school
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Machine stencil, $ .35

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COOPERATIVE CHEMISTRY TEST, FORM Z

This two-part test is based upon material taught in a typical high school chemistry course and is therefore well suited to use as a measure of end-of-course achievement. Part I, which includes two-thirds of the questions, tests the student's knowledge of basic chemistry; fundamental concepts and terms, reactions, properties and preparations, atomic structure, and chemistry related to daily living. Part II is concerned with laboratory procedures and the interpretation of reading passages, graphs and tables. Emphasizes the student's ability to apply his knowledge of chemistry and to interpret scientific information. Separate answer sheets may be used and may be either hand or machine-scored.

Grades: High school
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35

COOPERATIVE GENERAL SCIENCE TEST, FORMS Y or Z

This test consists entirely of short questions of the best-answer type. Some diagrams are included. Emphasis is placed primarily upon understanding of the reasons behind familiar scientific phenomena and processes, rather than upon mere memory of facts and definitions. The test, which samples the material commonly taught in general science courses, covers a sufficiently wide area to make it suitable for groups of varying backgrounds. Particularly useful as a measure of end-of-course achievement. Separate answer sheet may be used, and may be either hand or machine-scored.

Grades: High school
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35

COOPERATIVE PHYSICS TEST, FORM Z

This test, which covers the material taught in standard high school physics courses, is primarily suited to the measurement of end-of-course achievement. Items dealing with mechanics, heat, light, sound, and electricity are distributed throughout the test in proportion to the emphasis most generally placed upon them. Separate answer sheets may be used, and may be either hand or machine-scored.

Grades: High school
Time: 40 minutes
Price: $3.60 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35

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COOPERATIVE SCIENCE TEST FOR GRADES 7, 8, and 9, FORM Y

This test is divided into three separately timed parts. Part I, Informational Background (40 minutes) and Part II, Terms and Concepts (15 minutes) consist of multiple choice questions. Part III, Comprehension and Interpretation (25 minutes) is made up of scientific reading selections, each followed by a number of questions which test the student's ability to understand, interpret, and apply what he has read.

The items call for a knowledge of the principles governing the functioning of common mechanical and electrical devices, such as the doorbell and the fuse, and such natural phenomena of the physical world as the weather, the seasons, and plant reproduction. Separate answer sheets may be used, and may be either hand or machine-scored.

Grades: 9th grade, and superior 7th and 8th grade students
Time: 80 minutes
Price: $3.95 per 25
Answer sheets, $1.25 per 25
Stencils, $ .35

DUNNING PHYSICS TEST, FORM AM

A measure of knowledge of basic facts, principles, and laws, as well as an understanding of physics. The fields covered include mechanics, heat, sound, light, electricity, and modern physics. Answer sheets are required. May be hand or machine-scored.

Grades: End of 1st year course in physics
Time: 45 minutes
Price: $4.45 per 35
Answer sheets, $1.50 per 35

NELSON BIOLOGY TEST, FORM AM

Measures knowledge and understanding of biological facts, concepts, and principles; ability to recognize cause-effect relationships; and ability to apply what has been learned in the appraisal of a life situation. Based on criteria presented in the 31st and 46th Yearbooks of the National Society for the Study of Education as well as leading courses of study and teacher guides for the most widely used textbooks. Answer sheets are required. May be hand or machine-scored.

Grades: End of a typical high school biology course
Time: 40 minutes
Price: $4.40 per 35
Answer sheets, $1.50 per 35

READ GENERAL SCIENCE TEST, FORMS AM or BM

A measure of knowledge and understanding of the basic facts and principles of the physical and biological sciences, and their applications in

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problem-solving situations. The test comprises 75 test items. Topics covered are: air, water, heat, light, sound, work and machines, magnetism and electricity; bacteria, the human body, nutrition, disease and health, conservation, plant life; chemistry of familiar articles; weather and climate, communication, transportation, geology, astronomy, space; scientific method. Answer sheets are required. May be hand or machine-scored.

Grades: End of high school general science course
Time: 40 minutes
Price: $4.45 per 35
Answer sheets, $1.50 per 35

STANFORD ACHIEVEMENT SCIENCE, FORM JM

Content is selected from the Science tests of the Intermediate and Advanced complete batteries.

Grades: 5-9
Prices: $3.10 per 35 test booklets
Answer sheets, $1.35 per 35 (required)
Stencils, $ .30 each

SOCIAL STUDIES

COOPERATIVE SOCIAL STUDIES TEST FOR GRADES 7, 8, and 9, FORM X

This test provides three part-scores: I, Informational Background; II, Terms and Concepts; III, Comprehension and Interpretation. Concepts from American and world history, geography, and civics are covered. Part III is based on typical maps, charts, and reading materials. Scores are useful when entering high school to show new teachers their standing. Separate answer sheets are optional, but when used the test booklet becomes reusable.

Grades: 9th and superior 7th and 8th grade students
Time: 80 minutes
Price: $3.95 per 25
Answer sheets, $1.25 per 25
Stencil for separate answer sheets, $ .35 each

STANFORD ACHIEVEMENT SOCIAL STUDIES, FORM JM

Content is selected from the Social Studies section of the Intermediate and Advanced complete batteries.

Grades: 5-9
Prices: $3.75 per 35
Answer sheets, $1.35 per 35 (required)
Stencils, $ .30 each

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STUDY SKILLS

SPITZER STUDY SKILLS TEST

A measure of mastery of the basic skills required for effective study. The test measures five important work-study skills through the following subtests: Using the Dictionary; Using the Index; Knowledge of Sources of Information; Understanding Graphs, Maps, and Tables; and Organization of Facts in Note Taking. Results of each subtest are sufficiently reliable to be useful for diagnostic purposes. Answer sheets are required for each pupil tested. May be hand or machine-scored.

Grades: 9-13
Time: Tests 1-4, two class periods
Test 5, 35 minutes
Prices: $5.50 per 35
Answer Sheets, $1.80 per 35

SPELLING

BUCKINGHAM EXTENSION OF THE AYERS SPELLING SCALE

A scale from which to select words for testing purposes. In pamphlet form to be placed in the hands of each pupil for a study of the words.

Grades: 2-9
Price: $ .50 each

MORRISON-McCALL SPELLING SCALE

A booklet containing eight spelling lists of fifty words each, ranging from easy to difficult. The same list may be used in all grades.

Grades: 2-8
Price: $ .30 per copy

NATIONAL ACHIEVEMENT TEST IN SPELLING, FORMS A or B

A list of words that should be familiar to the different grade levels. Tests are on four levels and should be ordered that way.

Grades: 3-4
5-8
7-9
10-12
Price: $2.15 per 25

VOCABULARY

COOPERATIVE VOCABULARY TEST, FORM Z

A 210 word vocabulary test from a careful sampling of the words in Thorndike's *Teachers Word Book*. The test is arranged in seven equivalent

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scales of thirty items each. Scores depend on the range of words known rather than on speed of recognition, and a score is meaningful even if only some of the scales are attempted. This arrangement increases the test's flexibility pemitting wide variation in timing from the suggested 30 minutes.

Grades: 7-12 and college freshmen
Time: 30 minutes suggested
Price: $3.25 per 25

DUROST-CENTER WORD MASTERY TEST—FORM AM

A test designed to provide a measure of general vocabulary level based upon carefully selected, functional vocabulary list, and to measure the extent to which the student is able to learn the meanings of unknown words by seeing them in typical context situations. The test is in two parts. Part I is a multiple-choice vocabulary test; Part II presents the same words used in meaningful sentences. A comparison of a student's scores on the two parts provides a measure of his ability to learn meanings from context. Percentile norms by grade. Separate answer sheets are required for each pupil, and are scored with the key that comes in the package.

Grades: 9-12
Time: 25 minutes, first testing period
35 minutes, second testing period
Price: $4.45 per 35
Answer sheets, $1.80 per 35

INGLIS TESTS OF ENGLISH VOCABULARY

These tests are designed to measure the pupil's knowledge of those words that belong neither to the everyday vocabulary of commonest words nor to the special or technical vocabularies, but to the vocabulary of the intelligent reader. Consequently the purpose is primarily to test the reading vocabulary rather than the active vocabulary.

Lower Level, Forms X or Y
Grades: 6-10
Price: $3.80 per 30

Upper Level, Forms A or B
Grades: 9 thru college
Price: $4.05 per 30

MICHIGAN VOCABULARY PROFILE TEST, FORMS AM or BM

The eight subtests cover human relations, commerce, government, physical sciences, biological sciences, mathematics, fine arts, and sports. The profile of knowledge in the various areas which the tests affords is

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important for guidance and counseling purposes, offering the necessary complement to measures of interest in the various areas. Can be scored in the booklet, or separate answer sheets may be purchased and the booklets reused. Separate answer sheets are required only for machine-scoring. They can be hand-scored with the key that comes in the package.

Grades: High School, College and Adults
Time: 50 minutes
Price: Test booklets, $4.45 per 35
Answer sheets, $1.80 per 35

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This is a book for teachers—it gives a list of 1811 words which have been selected as highly suitable for use in all forms of reading materials in grades 1, 2, and 3. The words are arranged in two forms: first in an alphabetical list of the 1811 words followed by a rating of 1, 2, 3, or 4. This rating indicates whether the word falls within the first, second, third or fourth 500 on the basis of importance as determined by application of the criteria mentioned in the introduction of the booklet. Following this list of words appears an alphabetical list of all the words in the first 500, a second list of words in the second 500, a third list of the words in the third 500, and a fourth list containing the 311 words falling within the fourth 500.

Grades: For use in 1, 2, and 3
Price: $ .50 per copy

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Counseling and guidance personnel, teachers, and administrators can compute intelligence quotients both quickly and accurately with these valuable, time-saving aids. The I. Q. Calulator consists of twelve tables—one for each year from ages five to sixteen inclusive.

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